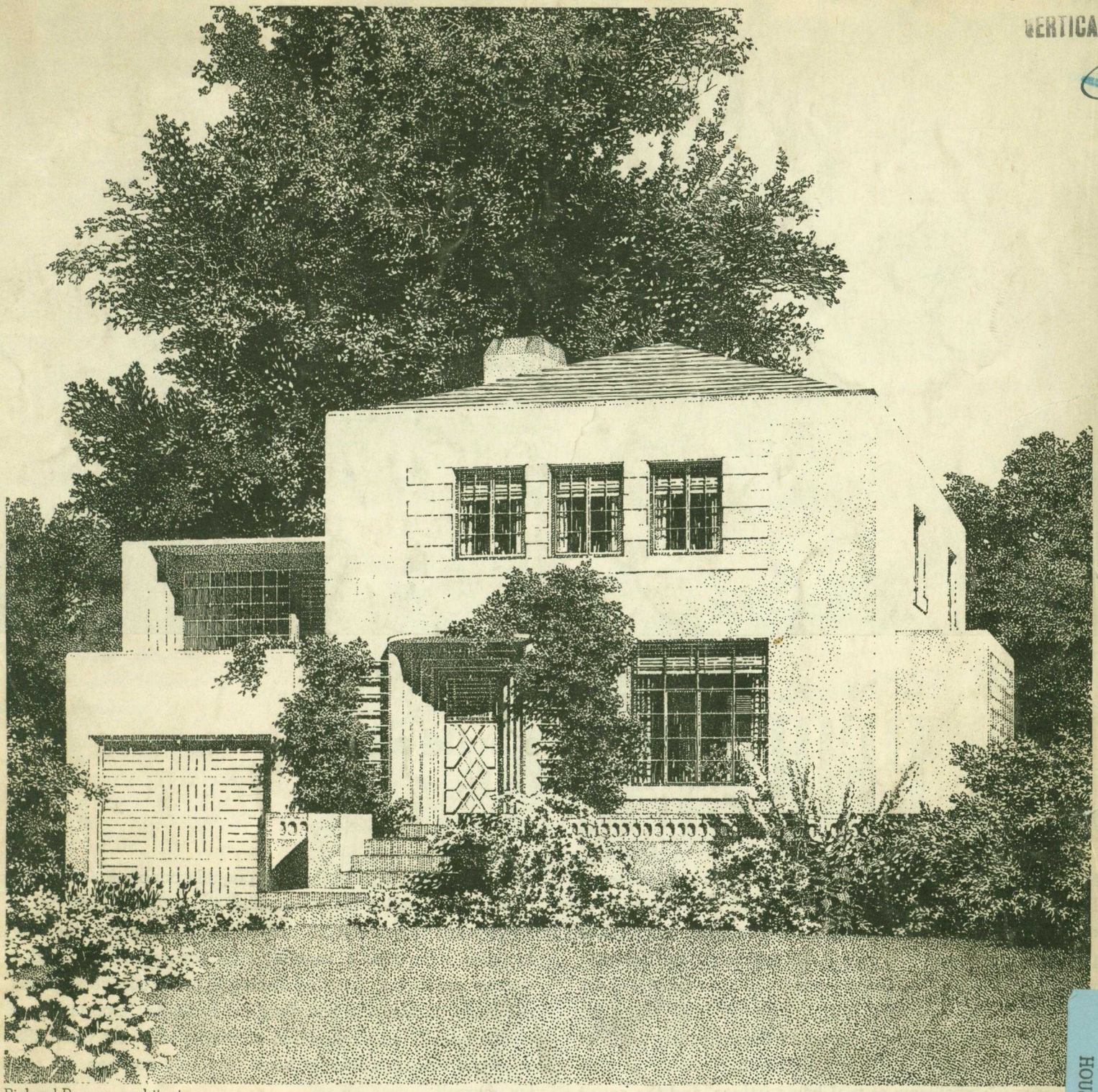
728.
ERTICAL
HOUSES- CONCRETE



Richard Powers, architect

1940

DESIGNED FOR CONCRETE

SELECTED DESIGNS FOR FIRESAFE CONCRETE HOMES FROM THE 1936

PENCIL POINTS—PORTLAND CEMENT ASSOCIATION ARCHITECTURAL COMPETITION

FOR PEOPLE who want to build a home

■ America is once more in the midst of increased home building activity. But this time, chastened by the results of over-speculative, hasty and careless construction that marked previous house building booms, we are more familiar with values, more certain of what we want, and more careful about what we get for what we spend.

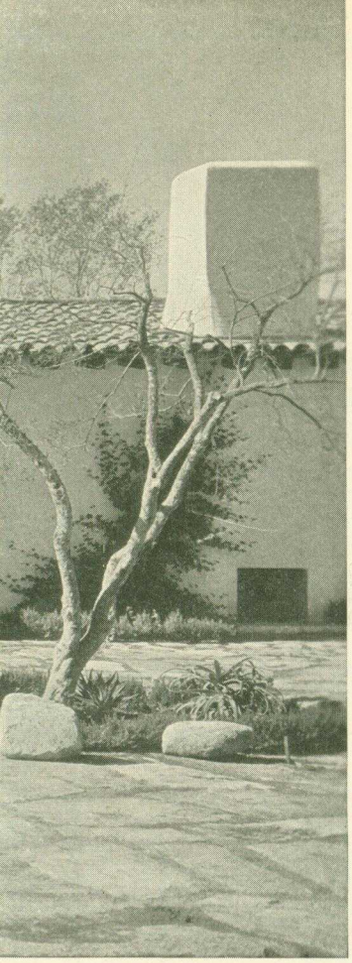
While home building lagged in recent years, the best minds among architects and builders had plenty of time to ponder the problems of real home values, and the result today is the development of a new type of American home —better than ever before and more economical to own. The new American homes are characterized by practical architectural styles, greater regard for interior comfort, and a sweeping turn to firesafe construction. Firesafe construction is becoming dominant not only because of the protection it offers against fire hazards and losses, but because it represents the most economical form of construction—the greatest long-time value in houses.

This booklet is really the story of America's new thought about houses. It contains designs selected from 1,521 plans submitted by America's foremost architects in the recent Pencil Points-Portland Cement Association Architectural Competition. All plans were submitted as solutions to one major problem—the design of the best possible concrete house, the type of construction that exemplifies the term "firesafe."

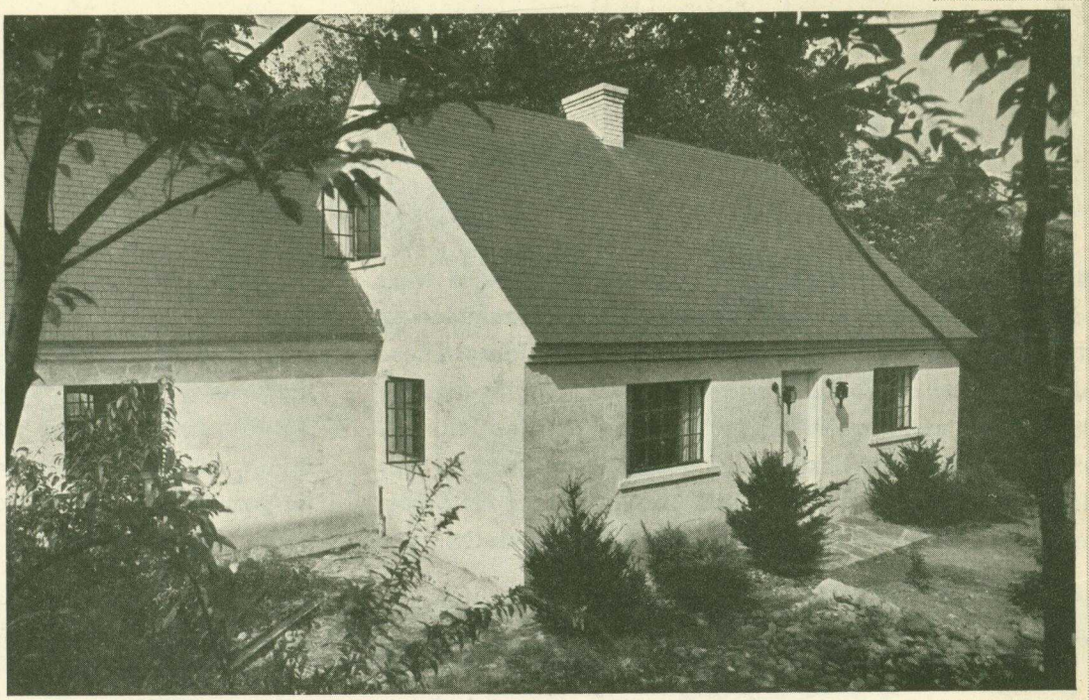
To aid the reader in visualizing the designs, there is included a portfolio of recently built concrete houses and a section devoted to detailed descriptions of concrete homes —outside, inside, and how they are built. An important part of this book is an explanation of why it will cost you LESS to own a firesafe concrete home and how you can get one for yourself.

Should any of these plans meet your ideal of the home you would like to own, write to the architect who designed it for information on how to get blueprints and specifications. He has made a careful study of the plan you have selected and doubtless will be glad to offer you his services in preparing these for you. Compensation for his services is a matter for you and your architect to agree on. Or, if you do not find in this book a design which meets your exact requirements, take your own ideas to a local architect who will design your firesafe concrete home to meet your individual needs and tastes.

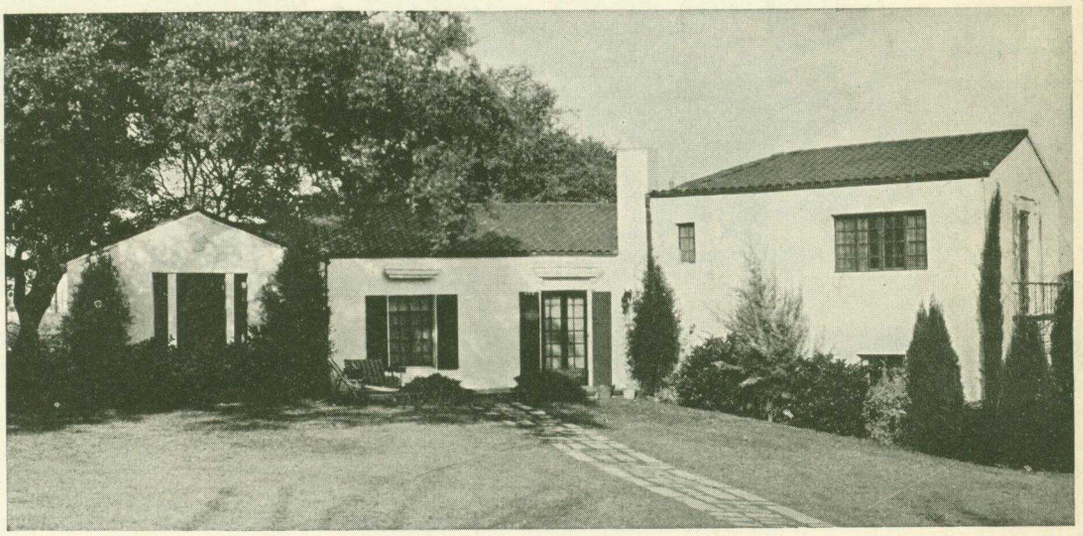
This booklet is presented with the hope that it will provide you many pleasurable hours, much helpful information, and a suggestion as to how YOU can own and live in the best home that money can buy.



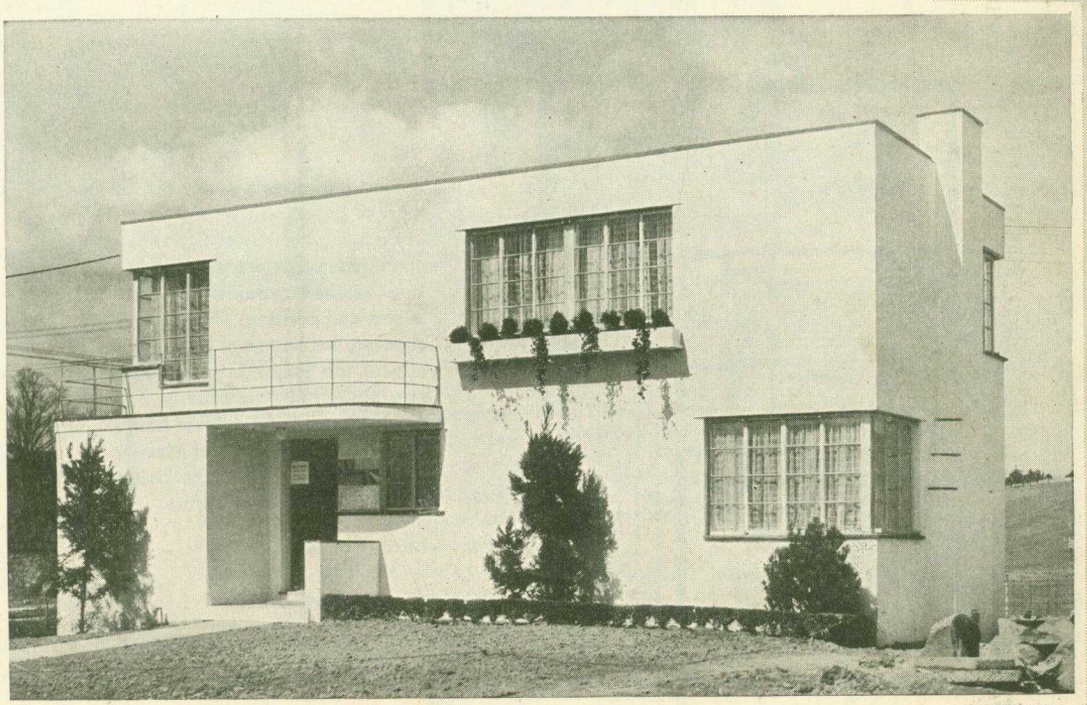
■ Santa Barbara County, Calif., ranch house. William Mooser Co., designer



■ Tappan, New York—Frank Harper Bissell, designer

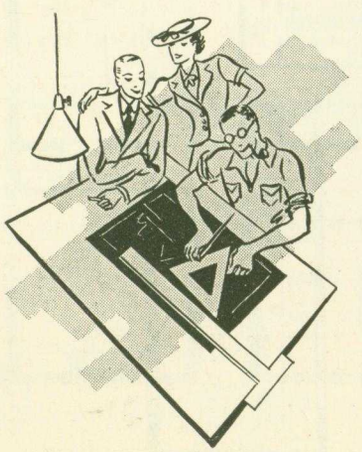


■ Austin, Texas—Glenn C. Wilson, designer



■ Yonkers, New York—Erik Kaeyer, designer

PUBLIC LIBRARY X THE CLEVELAND
SEP 23 1940

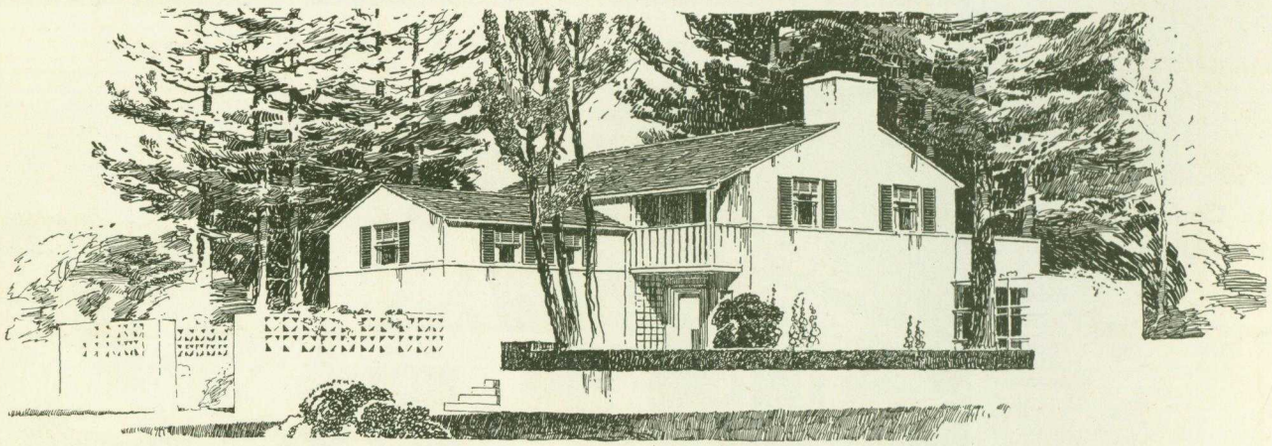


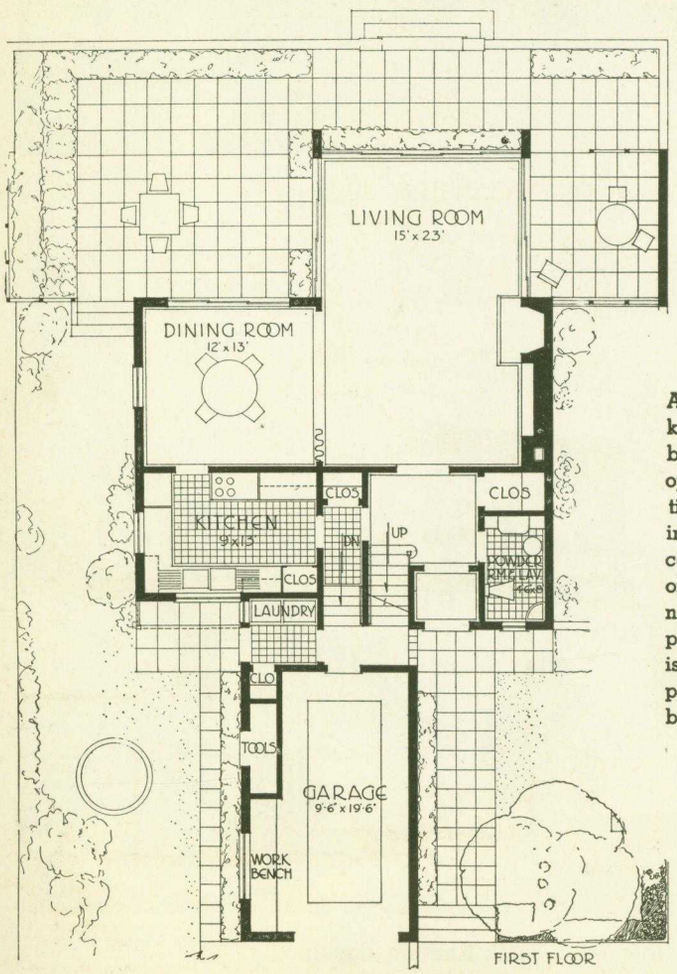
NOTES about the plans

■ The designs reproduced on the following pages were selected as representative of the wide variety of architectural styles popular among present day home builders. These include many of the familiar period styles, modifications of those styles, and some definitely "modern" designs. Since all of these houses were designed for concrete construction, they demonstrate the almost unlimited possibilities for charming, individual treatment in the use of this firesafe material.

Even though some of the drawings suggest specific exterior treatments such as masonry, ashlar, or stucco, it should be remembered that these houses can be erected in any of the several types of approved concrete construction.

These designs are not finished working drawings, but rather, suggested plans. For complete working drawings and for permission to use any of these plans for construction purposes, the designers must be consulted.

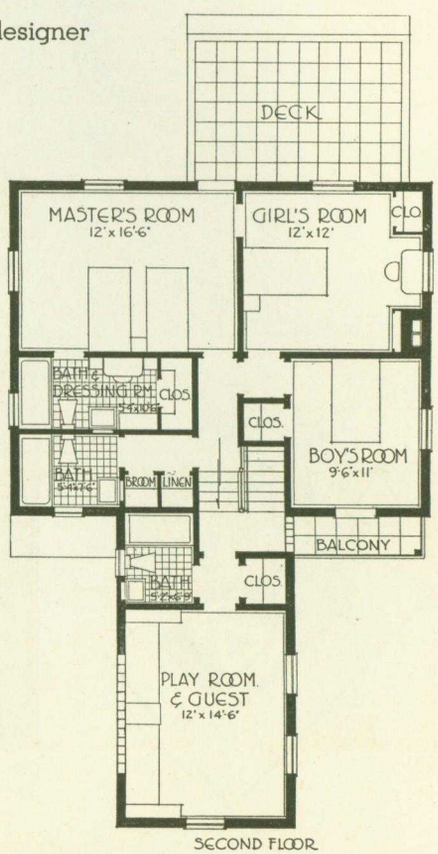




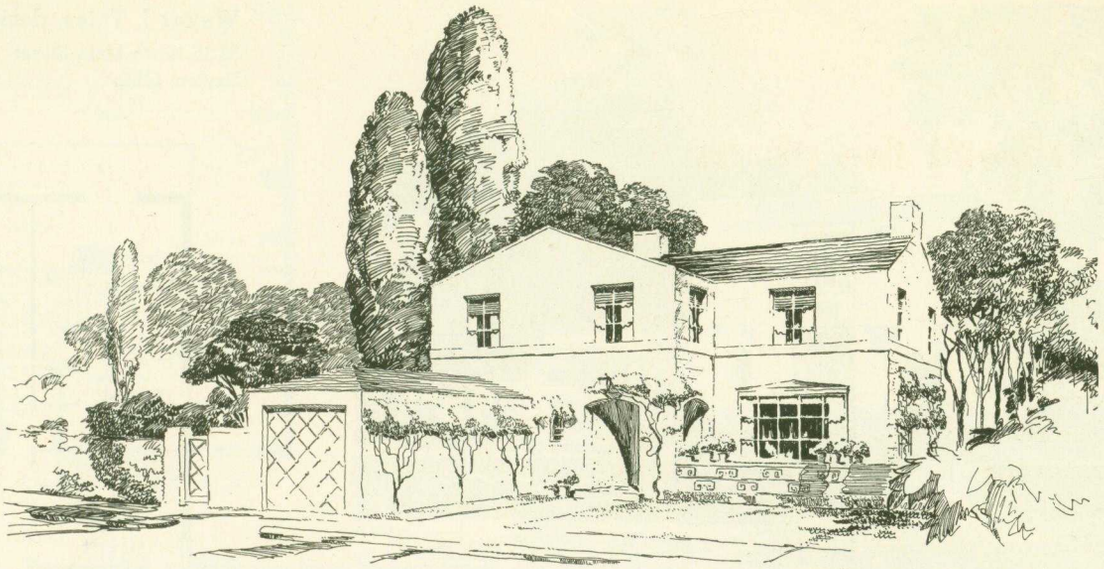
FIRST FLOOR

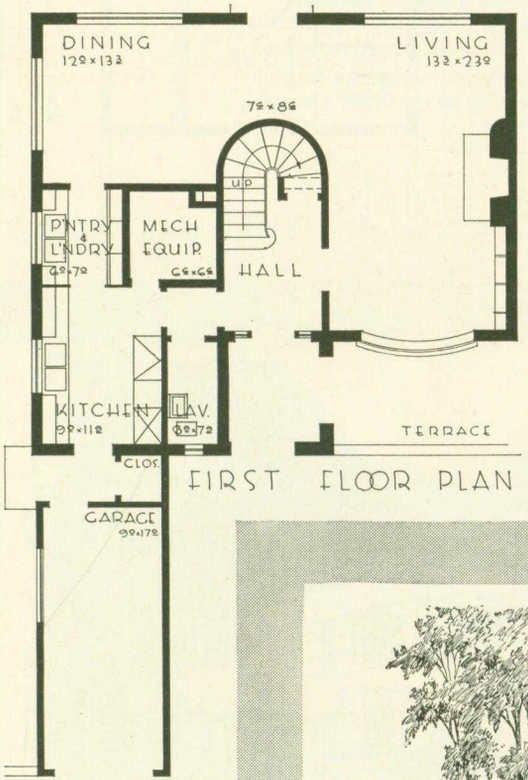
John Floyd Yewell, designer
10 East Fortieth Street
New York, New York

A most attractive exterior for the kind of house you would like to build in the country or on a rather open urban lot. The plan is practical and the rooms well related in size and position. The swing to concrete for homes of all types is one of the major tendencies of new house building activity. The popularity of the concrete house is attested by the fact that a larger percentage of them are being built today than ever before.



SECOND FLOOR

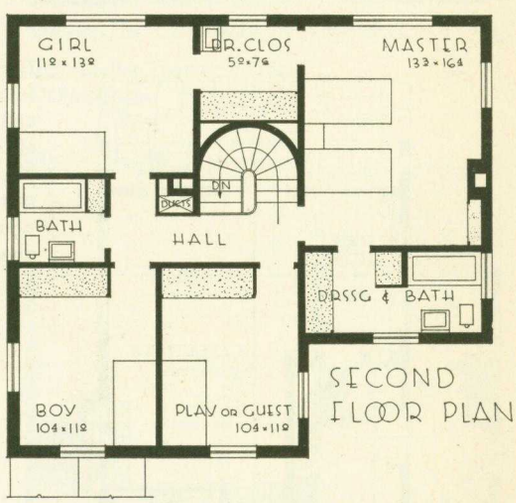




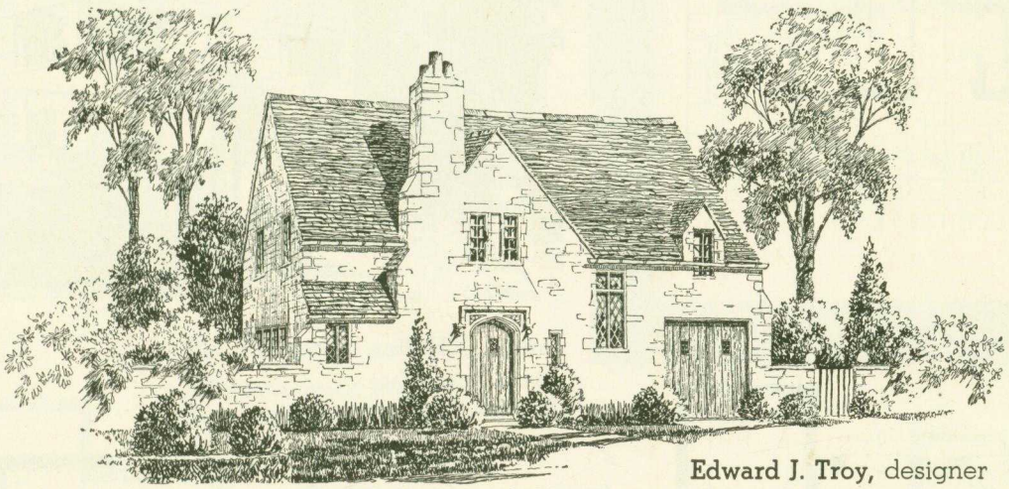
FIRST FLOOR PLAN

Matt L. Jorgensen, designer
Georgia School of Technology
Atlanta, Georgia

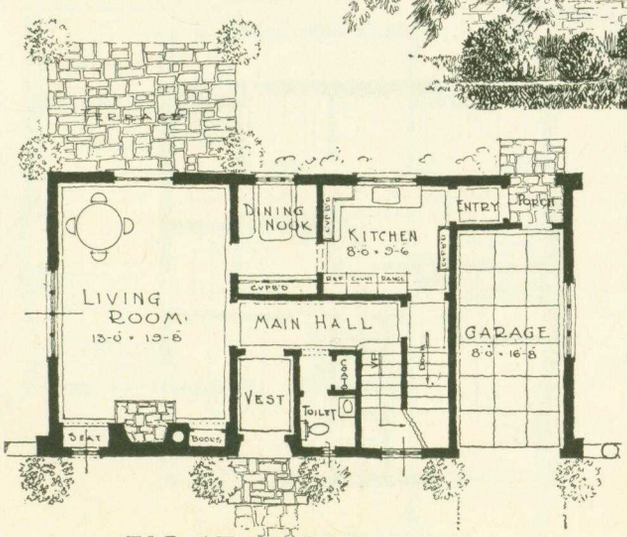
A roomy easily planned house for luxurious living at low cost. Concrete is used frankly to produce rather massive appearing walls. Interior finish of concrete walls depends upon the effects desired. Some prefer exposed concrete, painted and decorated. Others lean to plaster finishes. Either method produces warm, beautiful interiors.



SECOND FLOOR PLAN

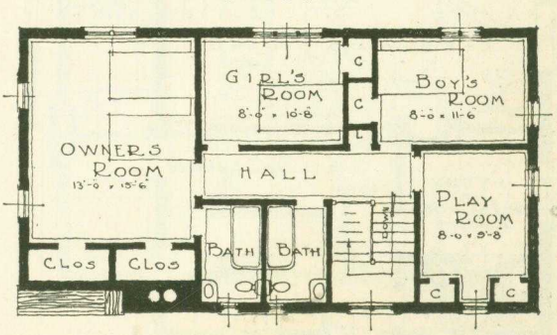


Edward J. Troy, designer
1257 Fairfield Ave., Bridgeport, Conn.



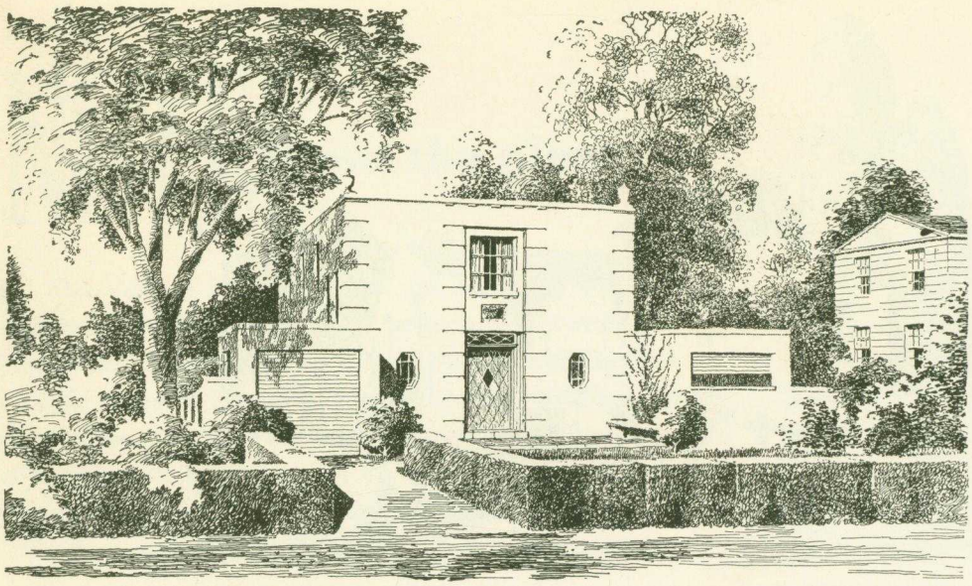
FIRST FLOOR PLAN

A stately, dignified home in the old English manner employs several forms of concrete construction to produce its effective details. To build this house as it is designed, sacrificing none of its charming details, will cost surprisingly little more in concrete than plain surfaced walls. And this economical first cost is only one of the many economies of owning a wearproof, ageless concrete home.

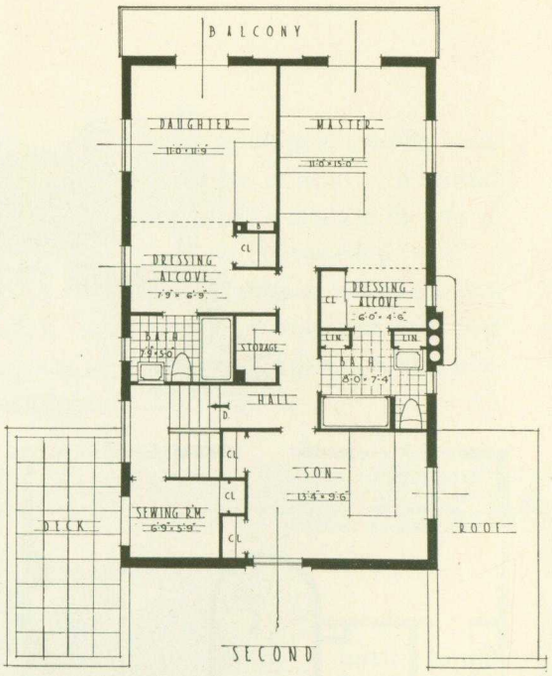


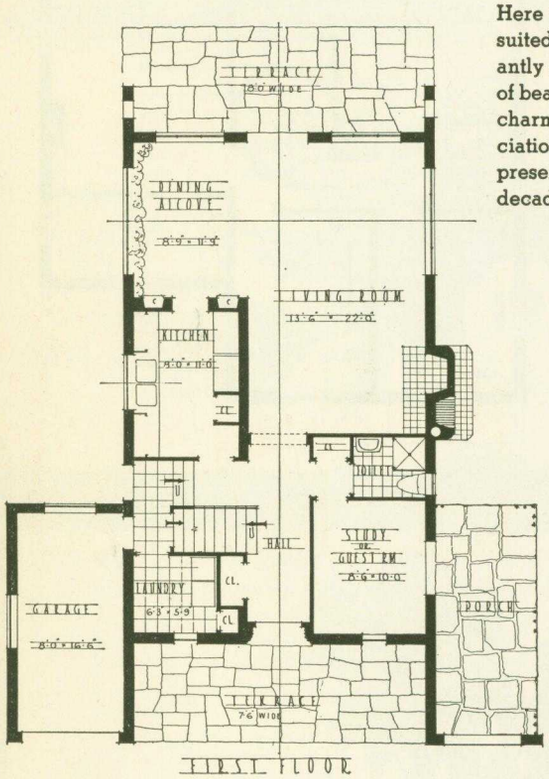
SECOND FLOOR PLAN

(For use of these plans see page 4.)

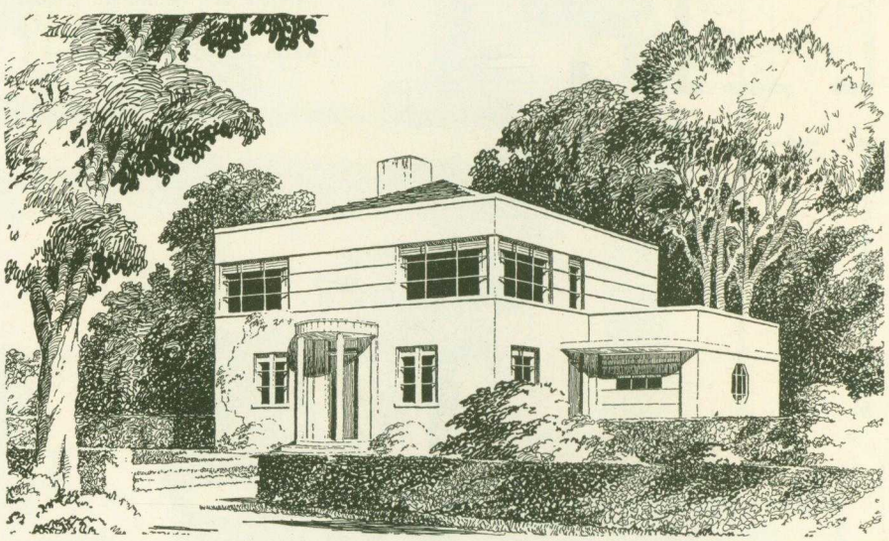


Walter J. Thies, designer
3135 North Main Street
Dayton, Ohio

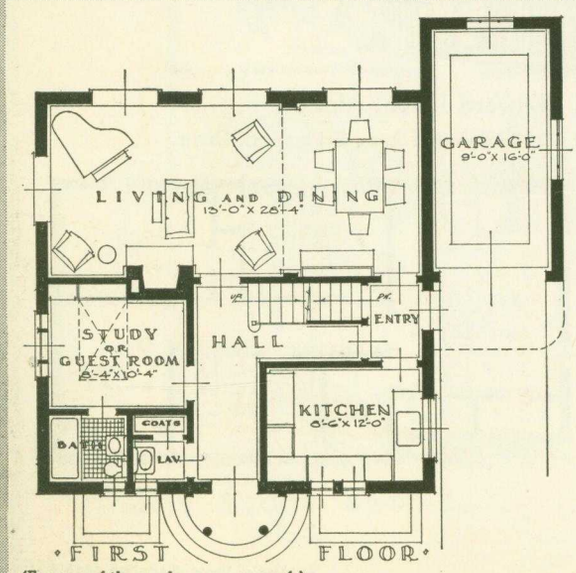




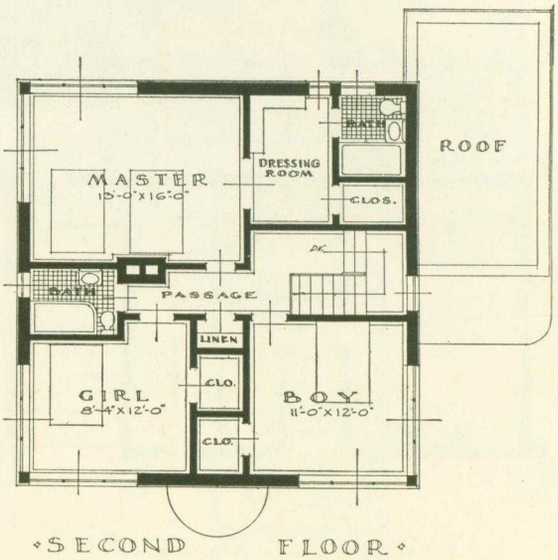
Here is a simple, well balanced plan particularly suited to a narrow lot. Its modern design is pleasantly modified by a touch of the classical, a type of beauty that will wear well with time. This lasting charm is matched completely by the slow depreciation of its concrete construction which will preserve the value and beauty of this home for decades.



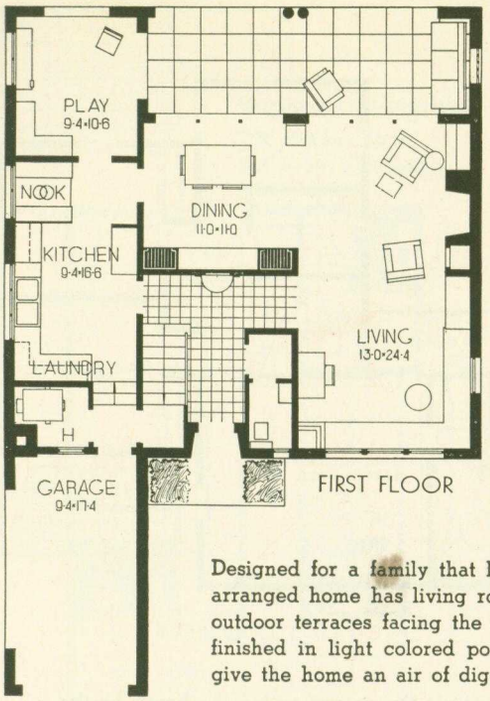
Robert I. Hillier, designer
134 St. James Place
Brooklyn, New York

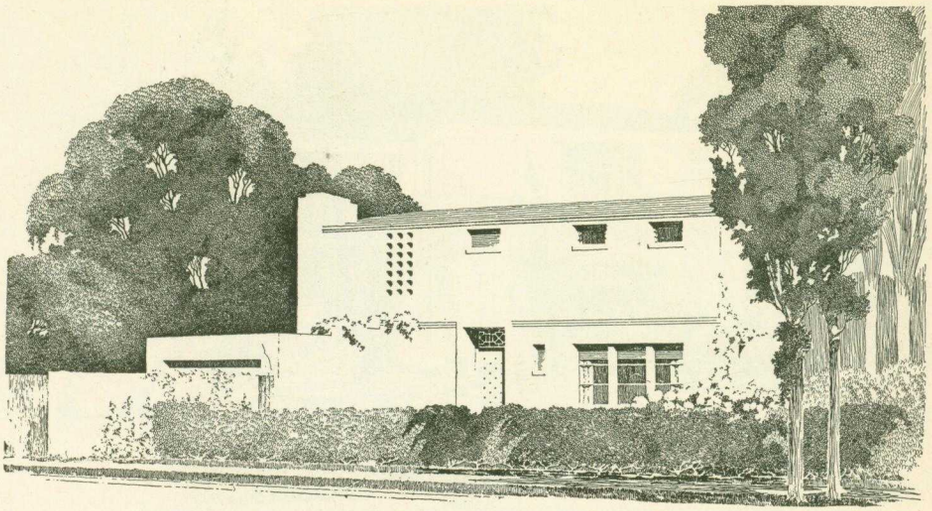


Interesting use of space and wide window areas all around the house characterize this design. The use of corner windows gives each bedroom bountiful light and cross ventilation. It is easy to insulate concrete houses by placing insulating materials in the walls or between walls and plaster, making such houses economical to heat in winter and far more comfortable in hot summer months.



(For use of these plans see page 4.)

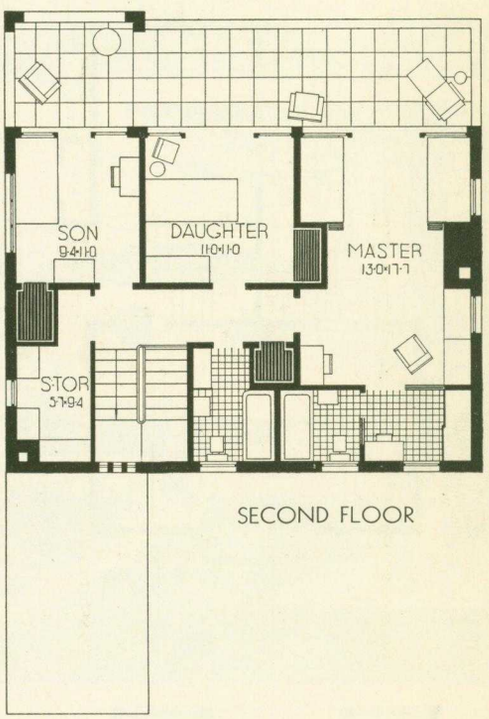




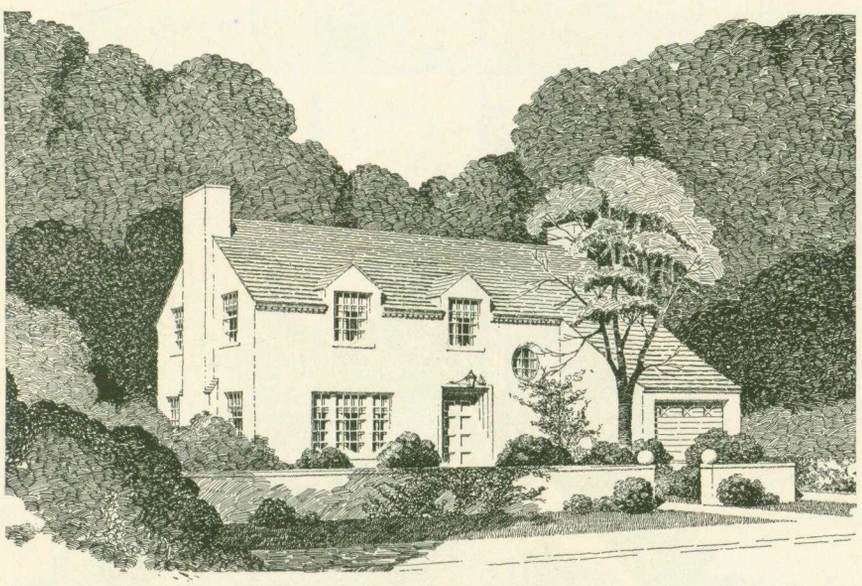
Designed for a family that loves plenty of light and air, this well arranged home has living room and three bedrooms opening onto outdoor terraces facing the garden. Its broad concrete wall areas finished in light colored portland cement stucco or cement paint give the home an air of dignified charm

Harris A. Kemp and
David G. Connally, designers

303 Melba Theater Building
Dallas, Texas

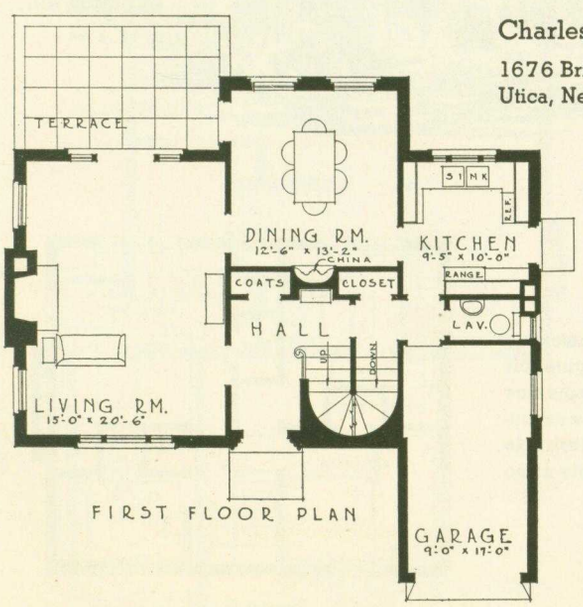


SECOND FLOOR

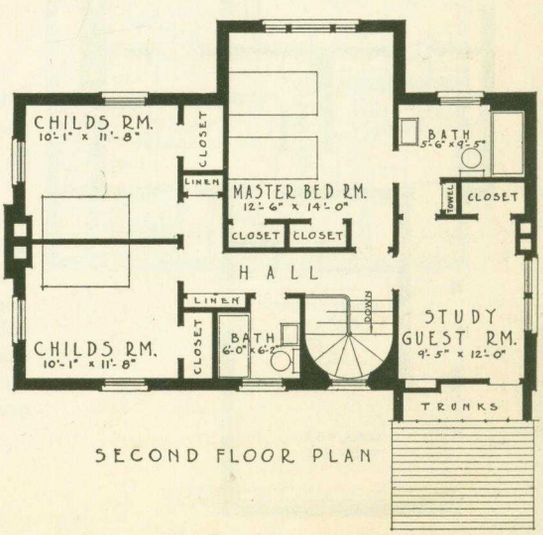


Charles A. Markley, designer

1676 Brinckerhoff Avenue
Utica, New York

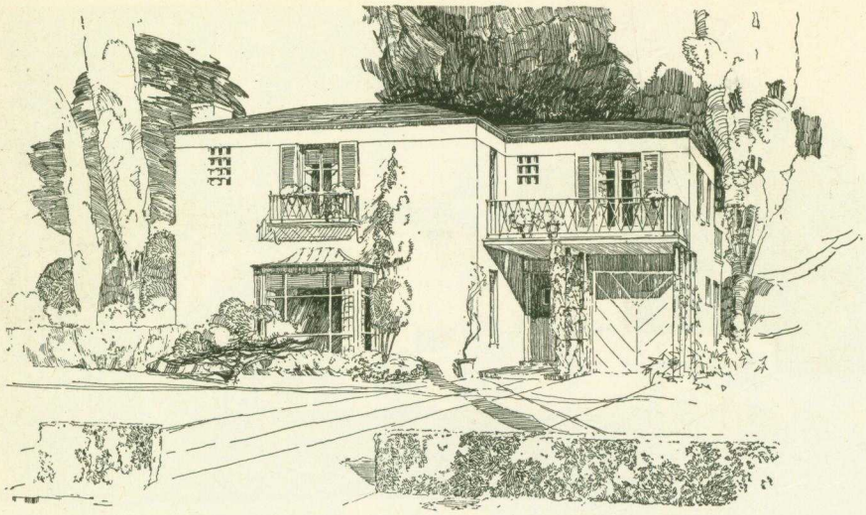


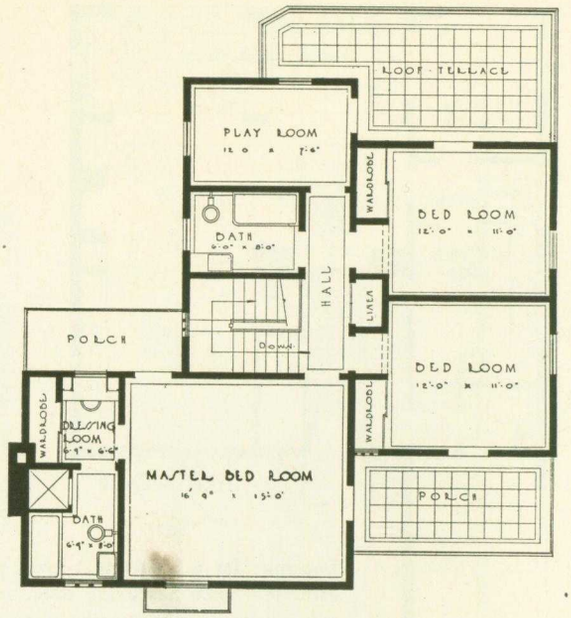
This modified period design cleverly encloses the garage within the graceful lines of its pitched roof. The roof, finished with cement asbestos shingles of a color suitable to the surroundings, completes the plan of fire protection assured by the concrete walls and floors.



SECOND FLOOR PLAN

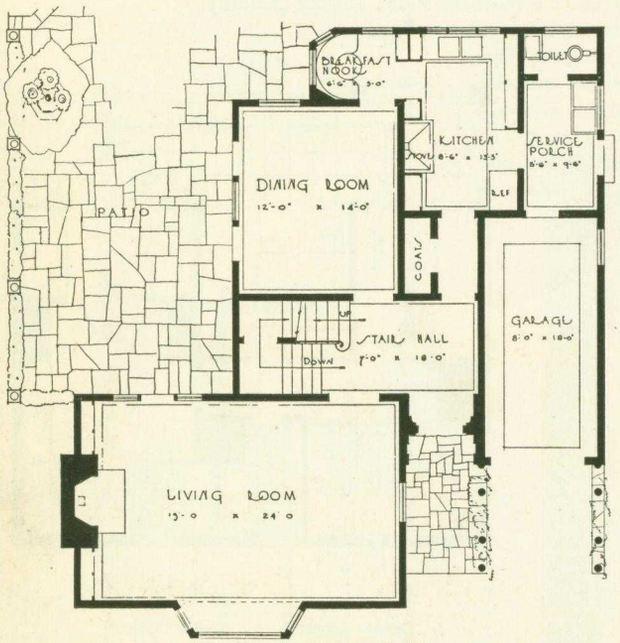
(For use of these plans see page 4.)





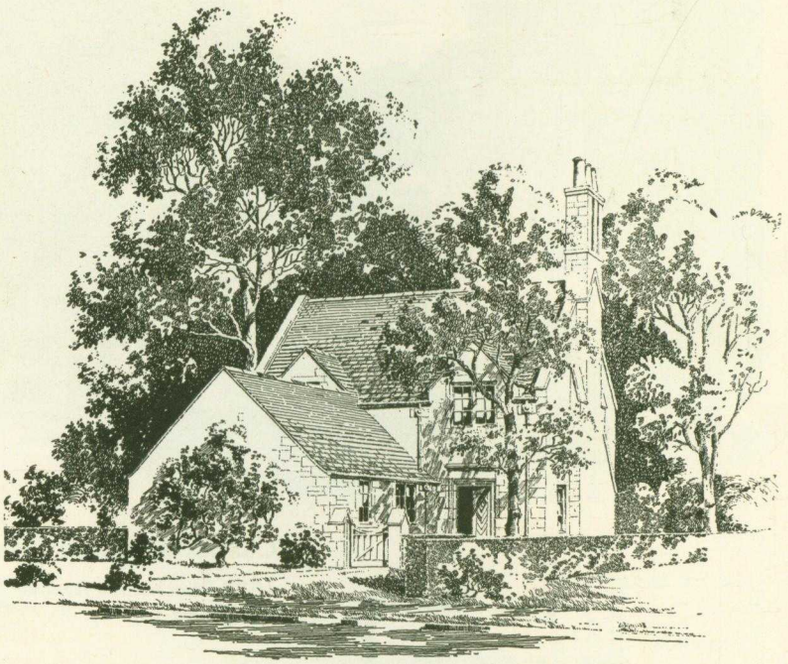
SECOND FLOOR PLAN

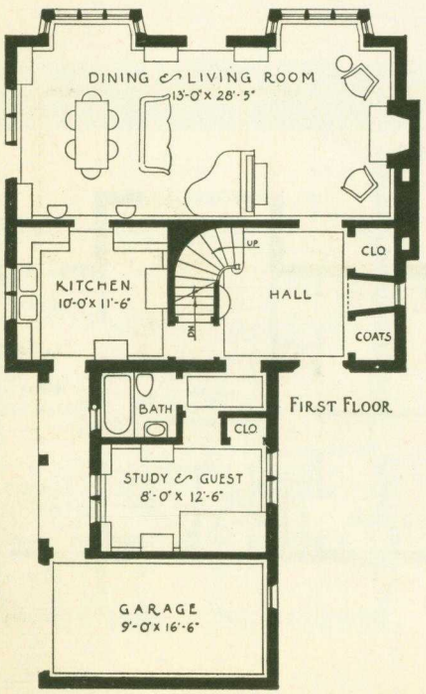
Sidney Eisenshatat, designer
2636 So. Bronson St., Los Angeles, California



FIRST FLOOR PLAN

A modified Spanish design conceals the garage within the house by the simple device of leading it in under a balcony. The plan provides large living rooms and light, airy retiring quarters. When first built, the beauty of this house will make it desirable for any home lover. The durability of concrete will keep it desirable through the years.

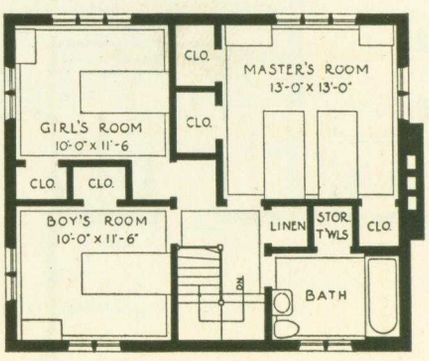




FIRST FLOOR

Russell A. England, designer
324 Endicott Building
St. Paul, Minnesota

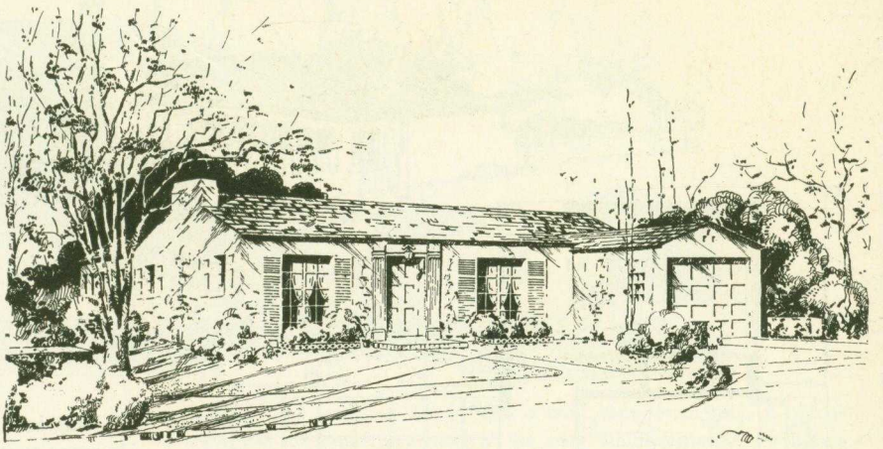
A substantial appearing house, suggesting somewhat the feeling of Gothic design. One can well imagine this home located in well wooded surroundings in some fine suburban community. No design is too intricate for execution in concrete, and for this reason many desirable architectural details can be produced in concrete at no greater cost than ordinary construction.

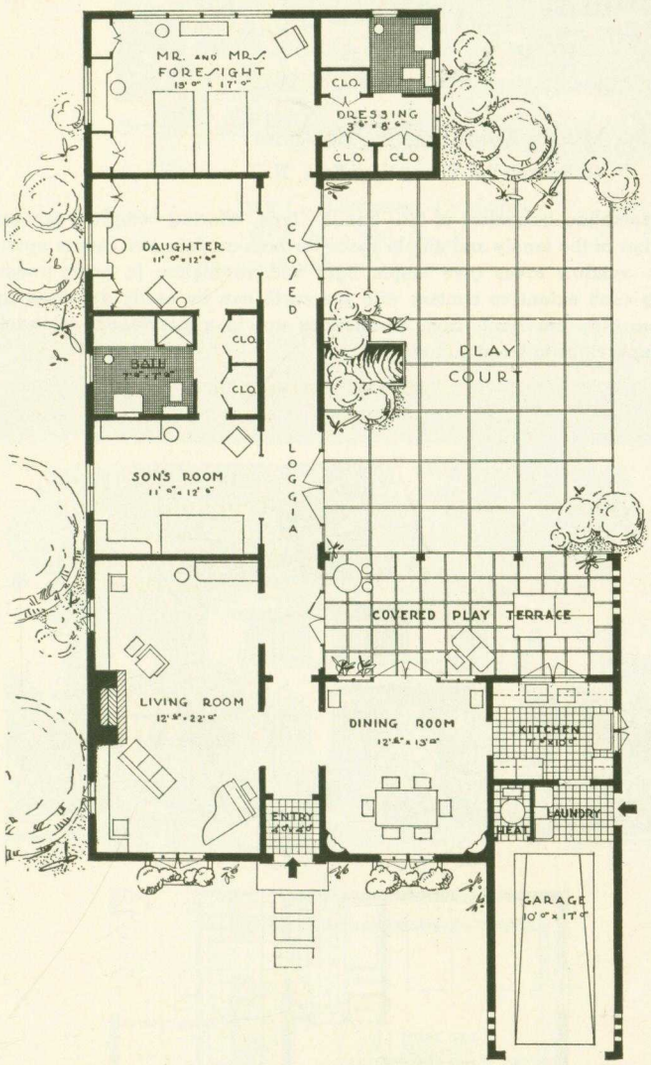


SECOND FLOOR

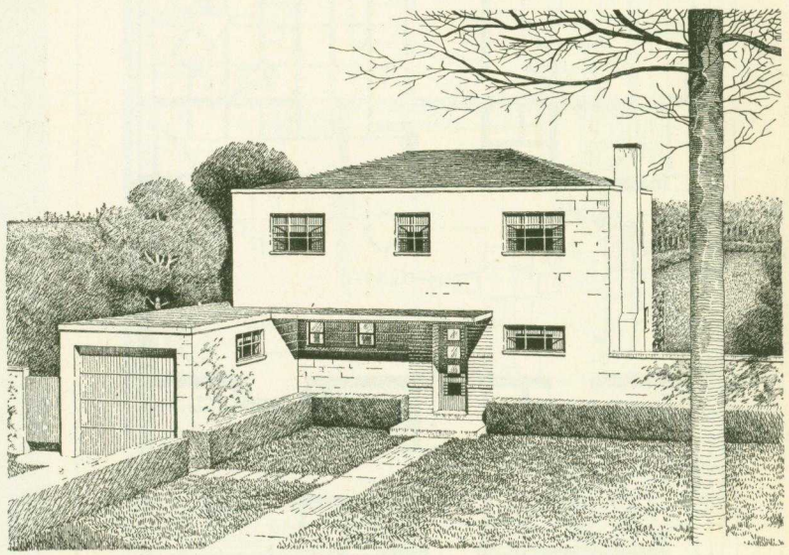
(For use of these plans see page 4.)

Eugene D. Gamble, designer
220 Ramsey Street
Stillwater, Oklahoma



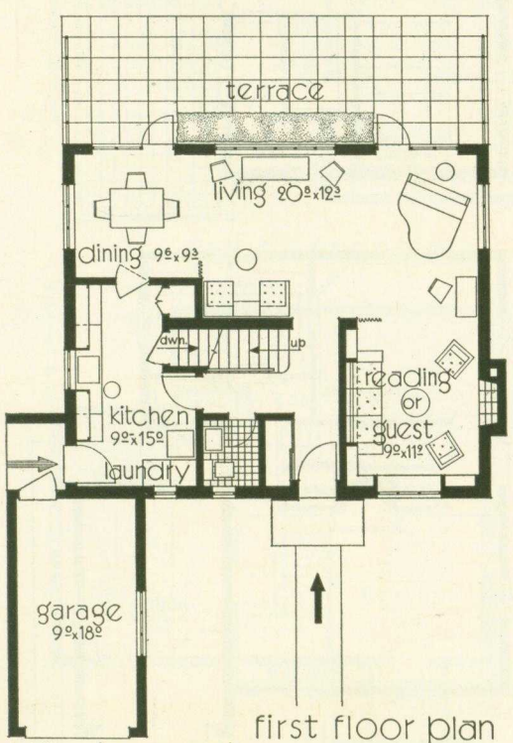


A roomy, flexibly planned bungalow with many happy outdoor living features. The sleeping quarters connect by means of a closed loggia which looks onto a broad terraced playcourt, part of it covered for rainy weather. You can insulate any concrete house against cold or heat by adding suitable materials to exterior walls and roof. This guarantees livable temperatures year 'round at minimum cost for heating or cooling.

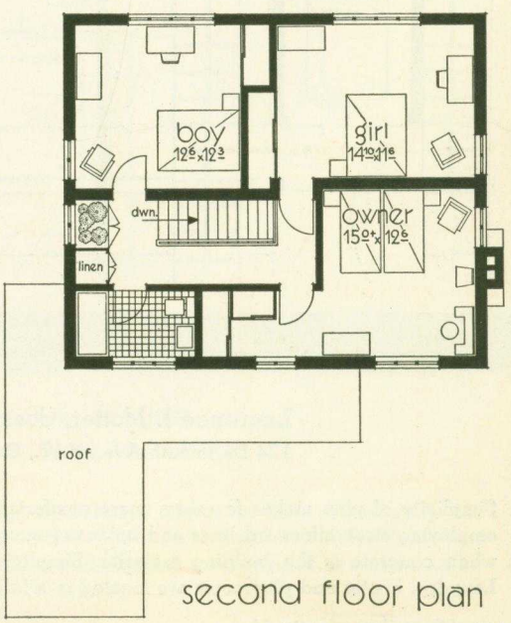


L. P. Sumarkoff, designer
820 No. Michigan Ave.
Chicago, Illinois

A small home in which every room is easily accessible to the others. Freedom of circulation throughout the home is one of the most desirable qualities in present day planning. Firesafety such as that offered by all-concrete construction is, of course, the major qualification of the modern home.

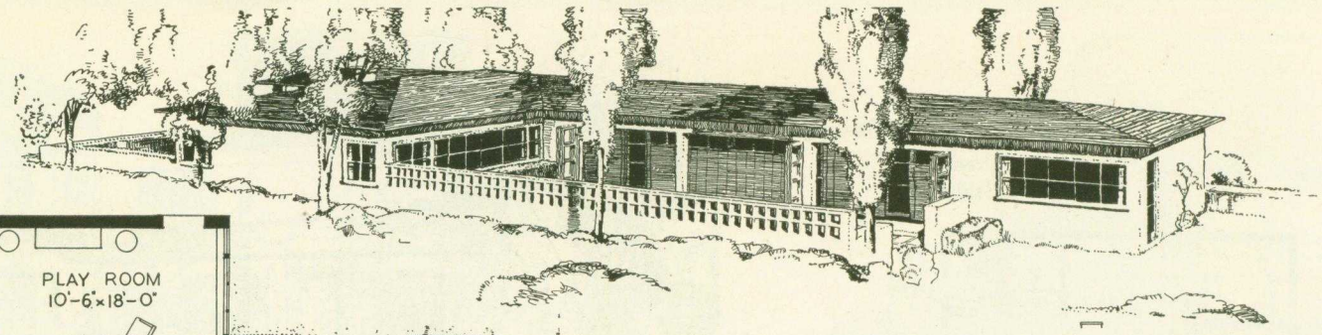


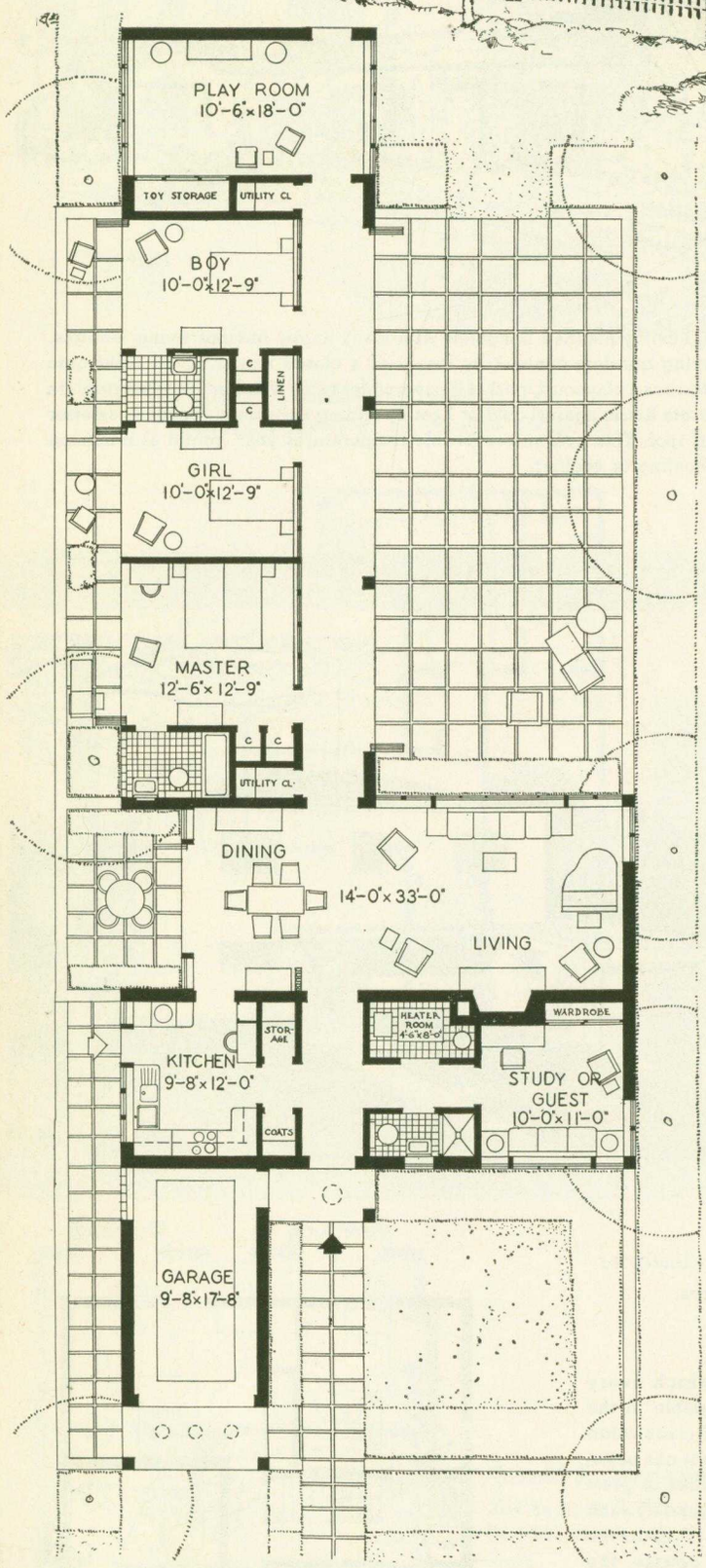
first floor plan



second floor plan

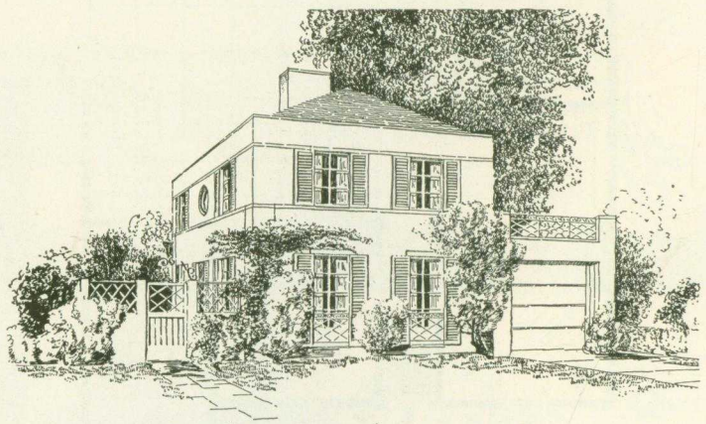
(For use of these plans see page 4.)

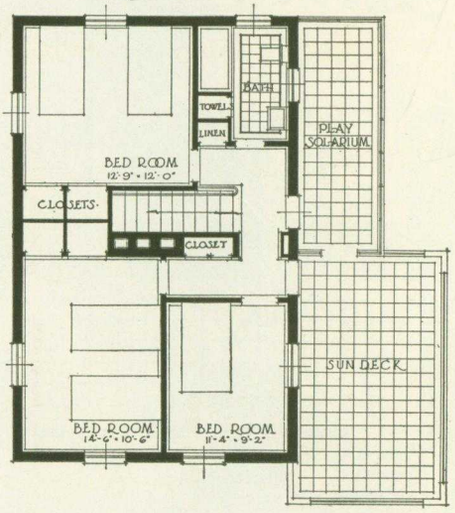


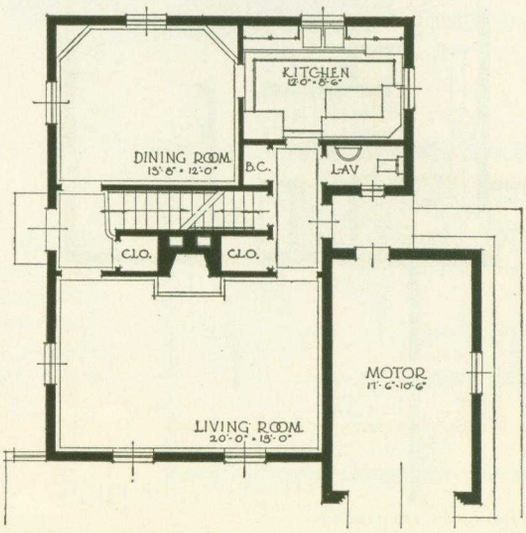


Morris Ketchum, Jr., designer
45 Rockefeller Plaza, New York, N. Y.

A long, low, rambling bungalow of the "ranch" type, offering complete privacy to every member of the family and ample space for both outdoor and indoor entertaining. Wide window areas give ample light and ventilation in every room. Homes having such extensive contact with the earth can be easily damaged by termites unless they are built, from foundations up, in a permanent material. Concrete is impervious to termite damage.



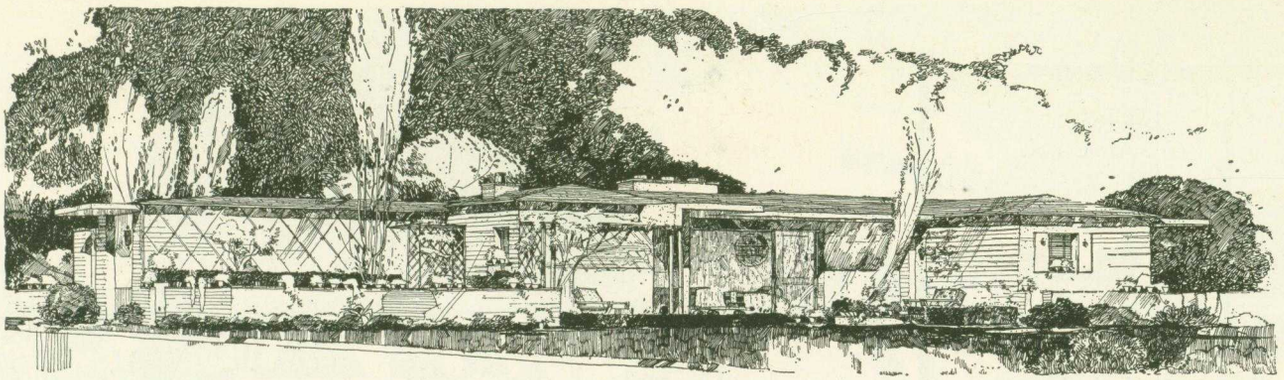




Laurence J. Motter, designer
124 Dartmouth Ave., N.W., Canton, Ohio

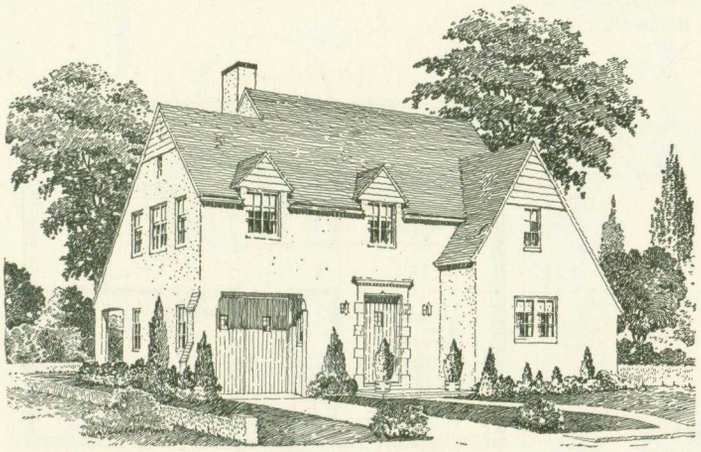
Simplicity of plan makes for easy, more comfortable living. An unpretentious design, employing straightforward lines and balanced masses, assures economy in construction when concrete is the building material. Simplicity is the charm of this little home. Laundry, heater and playrooms are located in a full basement.

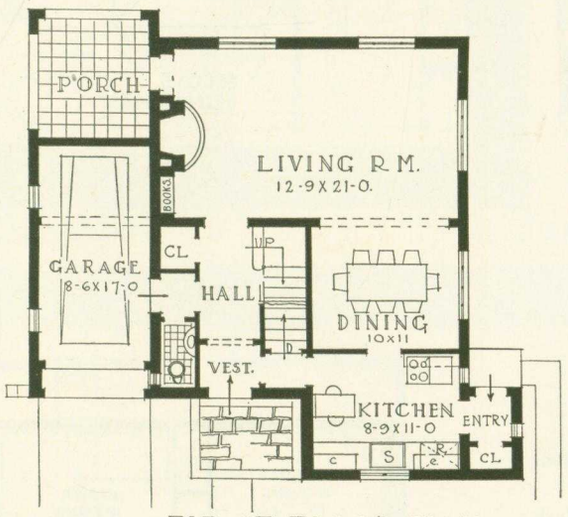
(For use of these plans see page 4.)



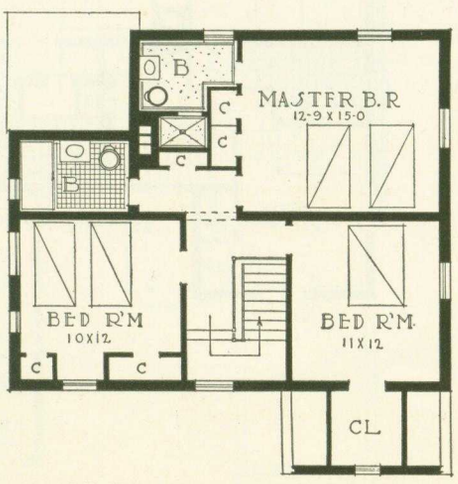
Ray C. Levanas, designer
127¾ West 78th Street
Los Angeles, California

A long, low rambling house with a well connected plan. A clever device is the children's room at the rear which provides for future privacy by allowing for a partition. Only in concrete can such a wide variety of individual designs be executed so freely; for concrete is adaptable to many forms and gives to each permanence, beauty and character.

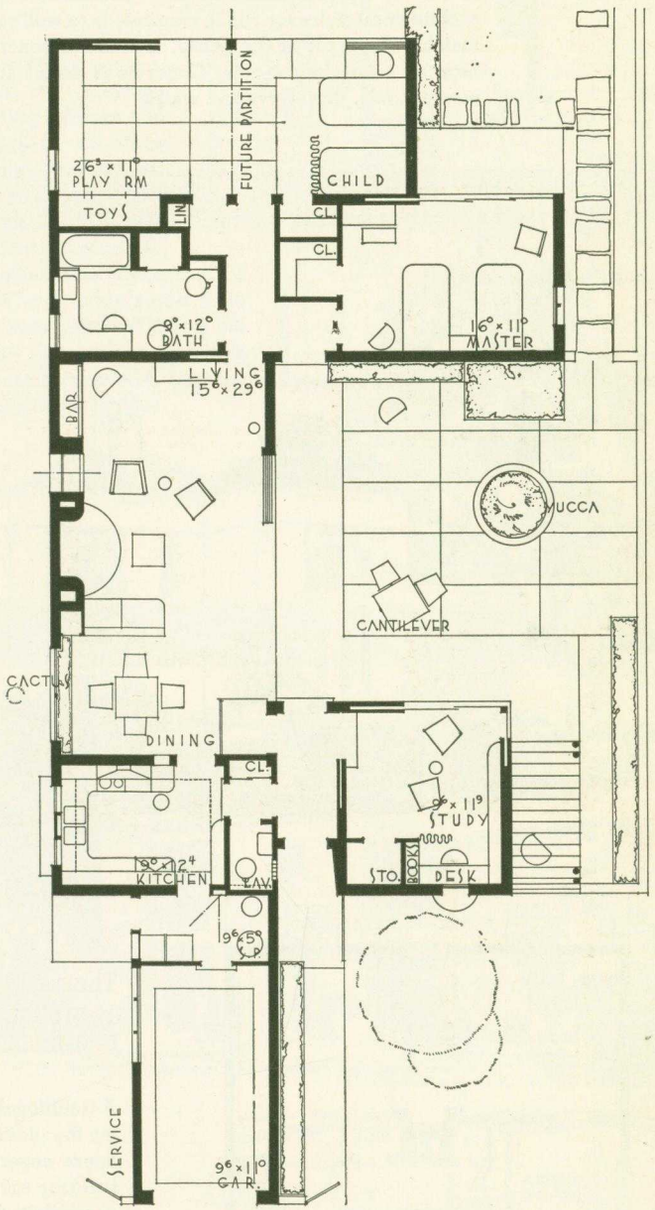




FIRST FLOOR PLAN



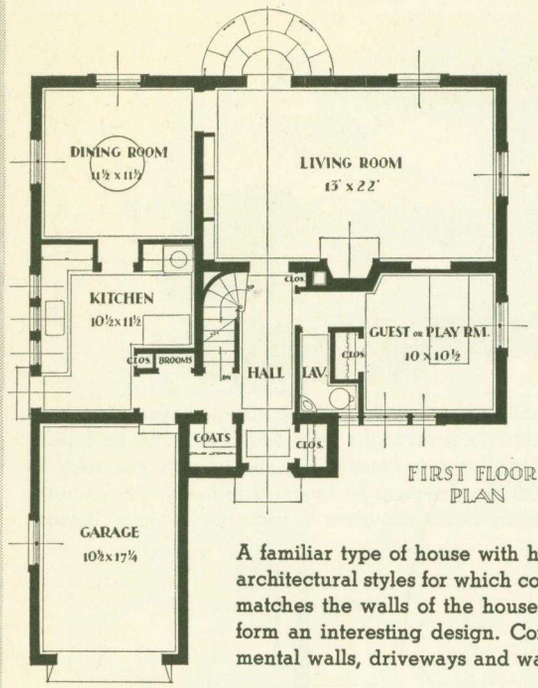
SECOND FLOOR PLAN

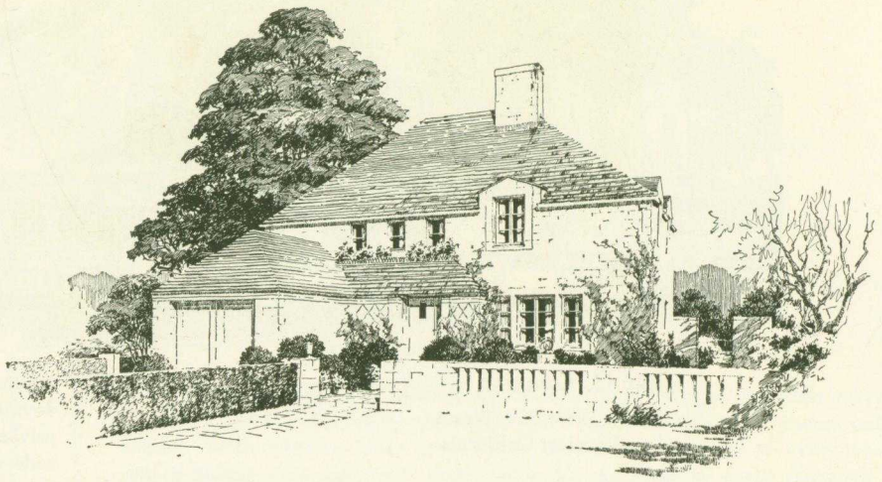


Robert L. Stevenson, designer
101 Tremont Street, Boston, Massachusetts

The clever manner in which the garage is contained within the lines of the house preserves the traditional feeling of this fine home. The exterior treatment of this house can be varied according to taste through the use of portland cement paint or stucco, ashlar or other wall finishes appropriate to the design.

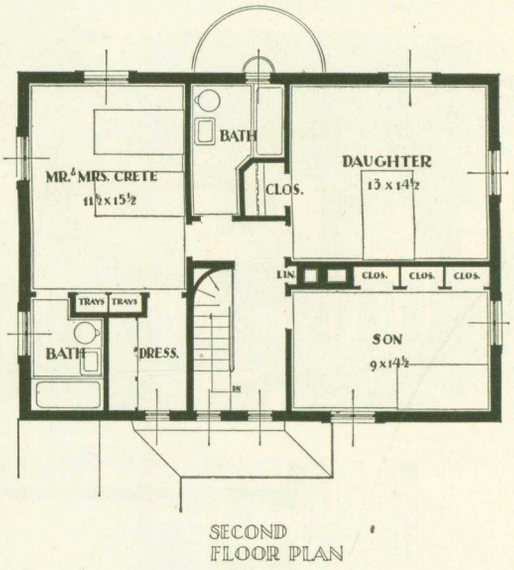
(For use of these plans see page 4.)

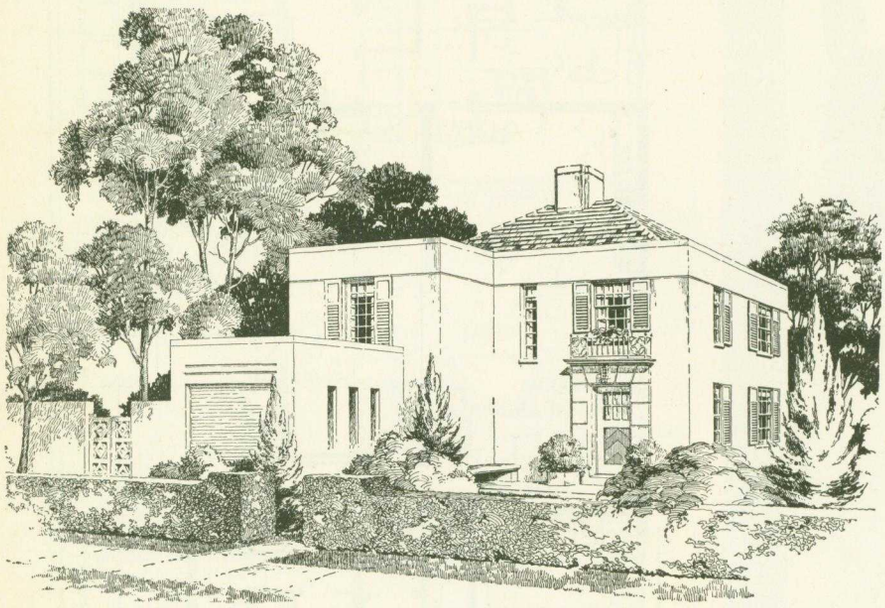


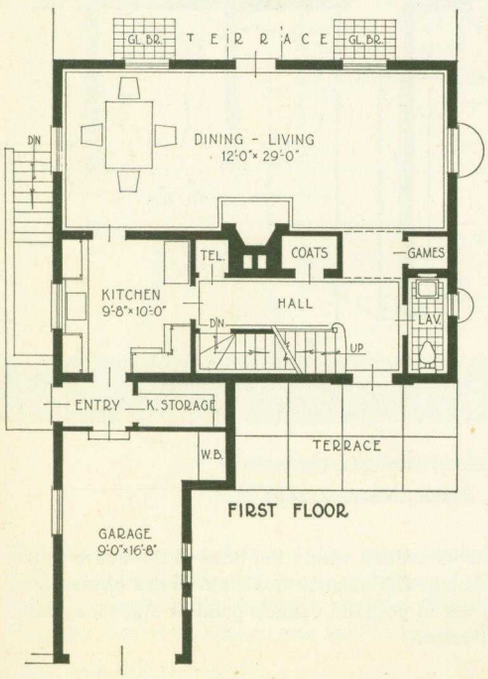


A familiar type of house with high pitched roof demonstrates one of the many architectural styles for which concrete is so well suited. The garden wall, which matches the walls of the house, is made of concrete masonry units laid up to form an interesting design. Concrete is useful all around the home for ornamental walls, driveways and walks.

Allen R. Congdon, designer
5 Orange Street, Nantucket, Mass.

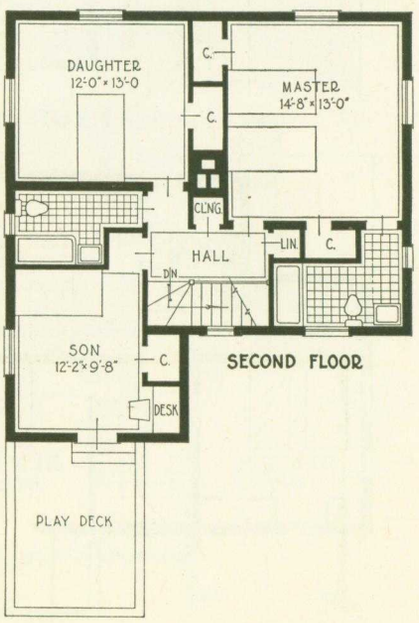




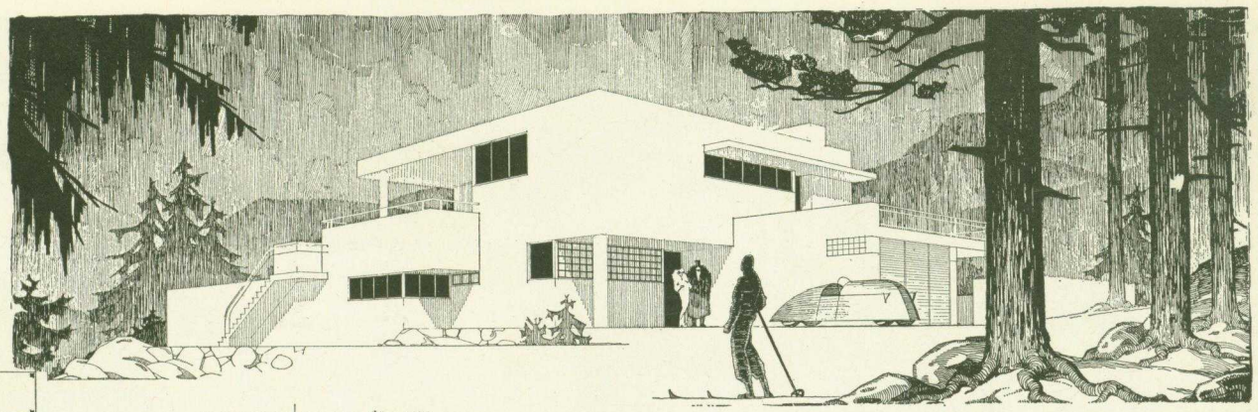


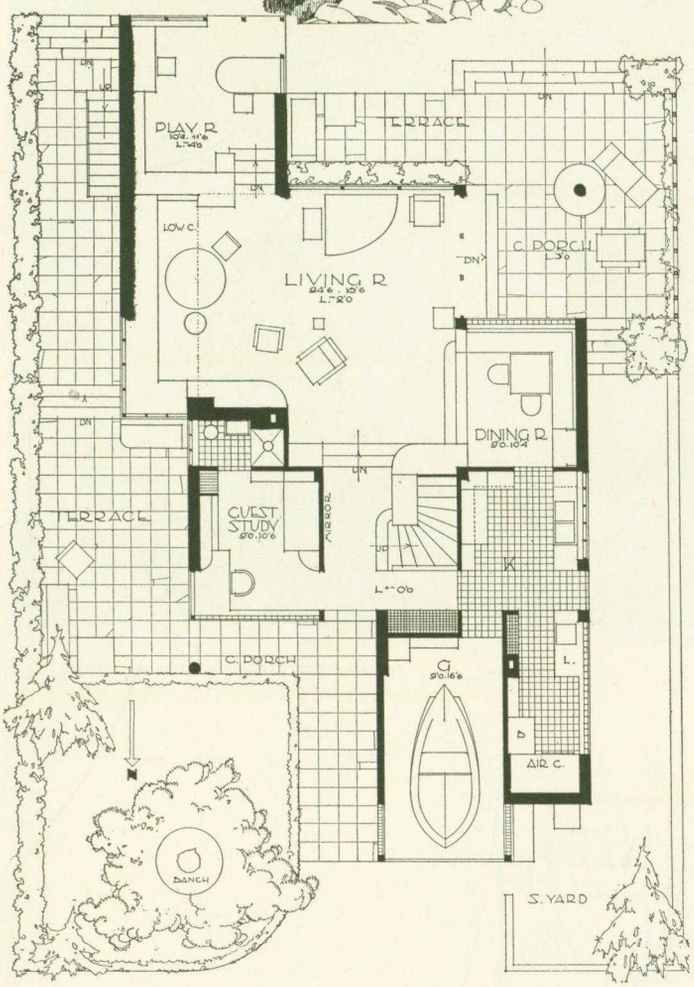
Thomas S. Arcuri, designer
130-11 225 Street
Laurelton, Long Island, New York

A traditional design for people who prefer the older forms of architecture, this house nevertheless has modern, roomy interior arrangements. Space above ground is devoted to general living quarters, with the playroom in the dry, well-lighted basement. In concrete homes where substantial foundations and concrete floors are standard, basements are clean, damp-proof and perfectly suited for year 'round use as living quarters.

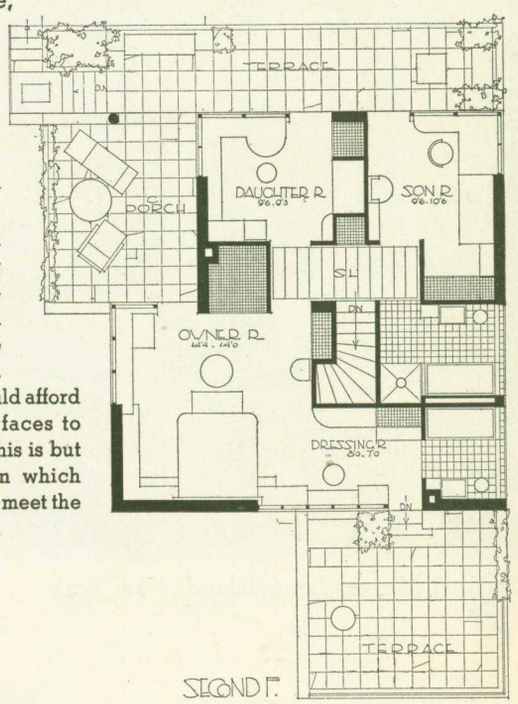


(For use of these plans see page 4.)

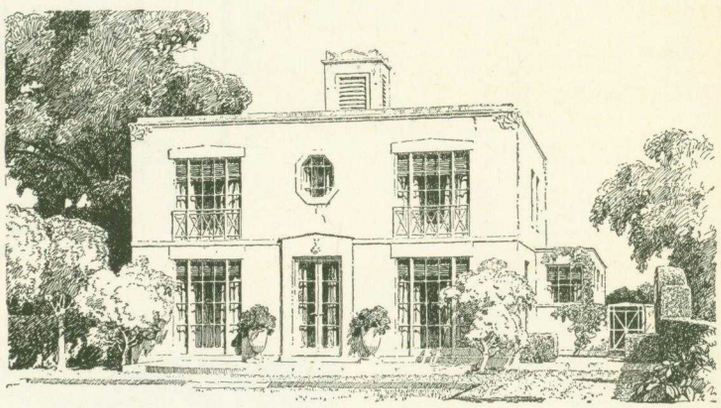


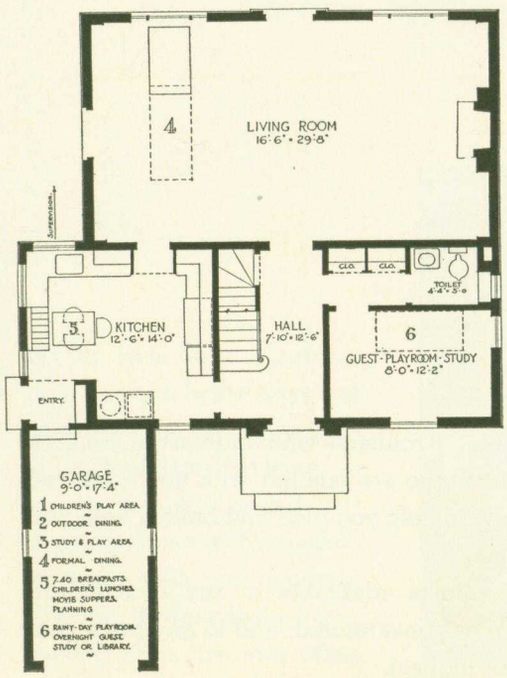


Nicholas B. Vassilieve, designer
324 West 75th Street
New York, New York



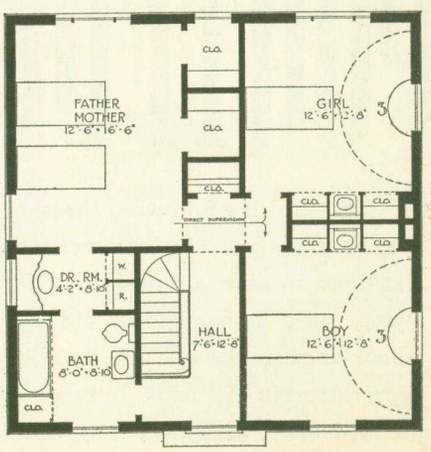
The ultra modern house—unbroken wall masses, intersecting planes and sweeping plan—a thrilling setting for modern, streamline living. Smart, clean and bright, this house declares that it is concrete. For what other material could afford to expose such wide surfaces to weather, wear and fire? This is but one of the many forms in which concrete can be molded to meet the taste of any home builder.





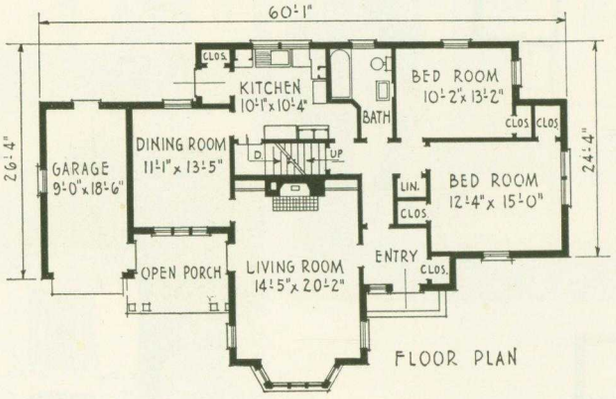
Owen Lau Gowman, designer
101 Park Avenue, New York, New York

Simply treated walls with wide window areas give a homey charm to this somewhat conventional design. The square arrangement of the plans utilizes maximum floor space throughout. The floors of this house, concrete covered with rugs or other modern floor coverings, are serviceable and beautiful.



(For use of these plans see page 4.)

Seaford Manor, Long Island, New York — Richard Heidelberger, designer



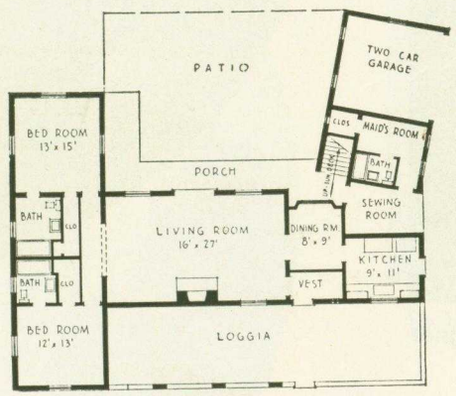
PORTFOLIO of new concrete homes

■ This and the following three pages are devoted to photographs, plans and interior views of newly built concrete homes. Designed in several types of currently popular architectural styles, these homes should aid greatly in visualizing the finished appearance of the houses anticipated in the plans reproduced in this book. In beauty, charm and livability, they are typical of hundreds of new houses built or under construction in firesafe concrete. Architects who understand concrete design, and contractors who are familiar with good concrete construction, are ready to help you plan and build a beautiful, firesafe concrete home.

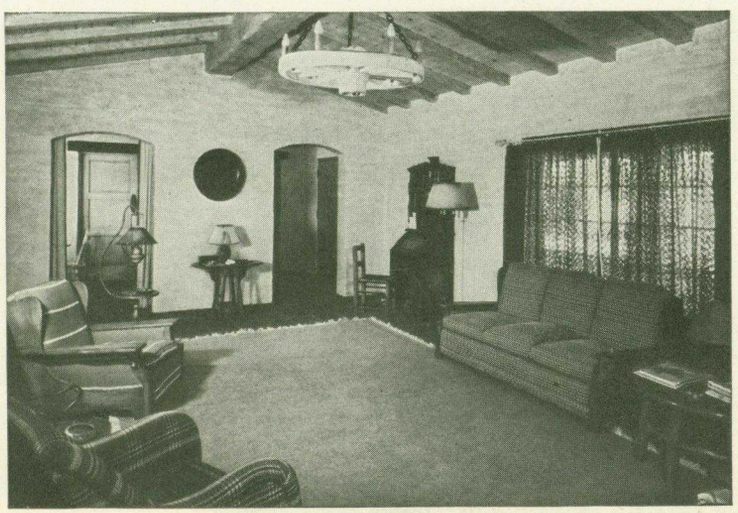
Remember, concrete is adaptable to any architectural style whether modern or conventional, and to any price class from the lowest to the highest.

Palm Springs, California

Leland F. Fuller, designer, Santa Monica

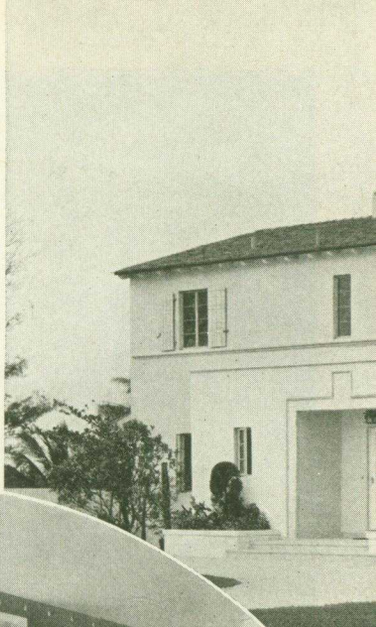


FLOOR PLAN.

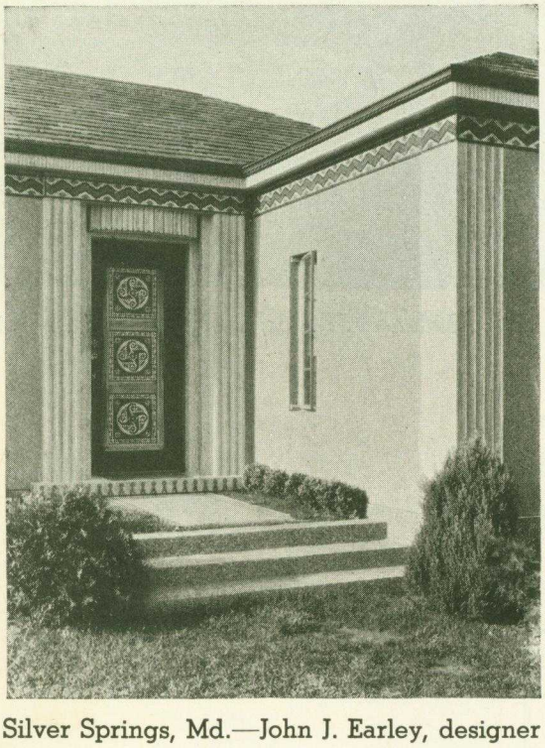


■ In style and construction, this fine home is typical of many other homes in fashionable Palm Springs. A comfortable, spread out plan, enclosed with concrete masonry walls and concrete tile roof, it offers desired protection from fire and other destructive elements. The Early American interior uses an attractive beamed ceiling and exposed concrete masonry walls. The floor—colored concrete marked off into tiles and polished—is covered partially by a fringed broadloom carpet.

Palm Springs, Calif.—Charles Matcham, designer

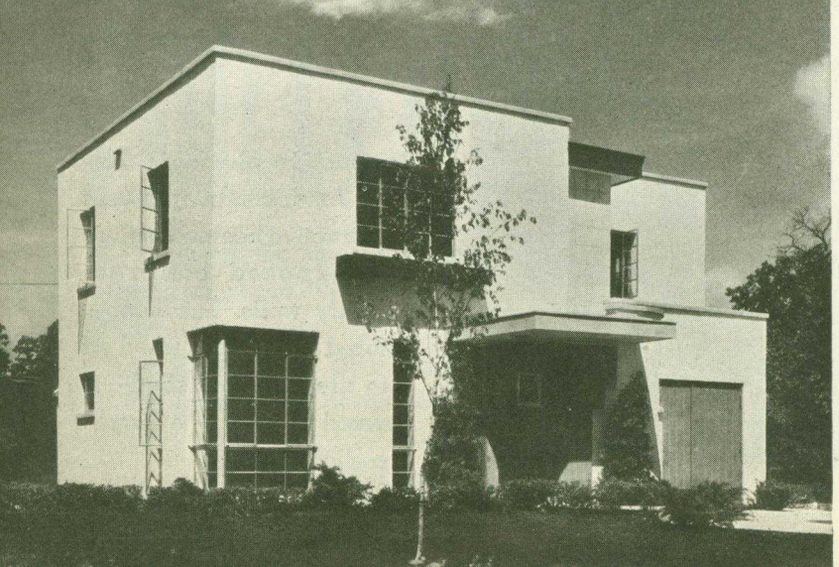


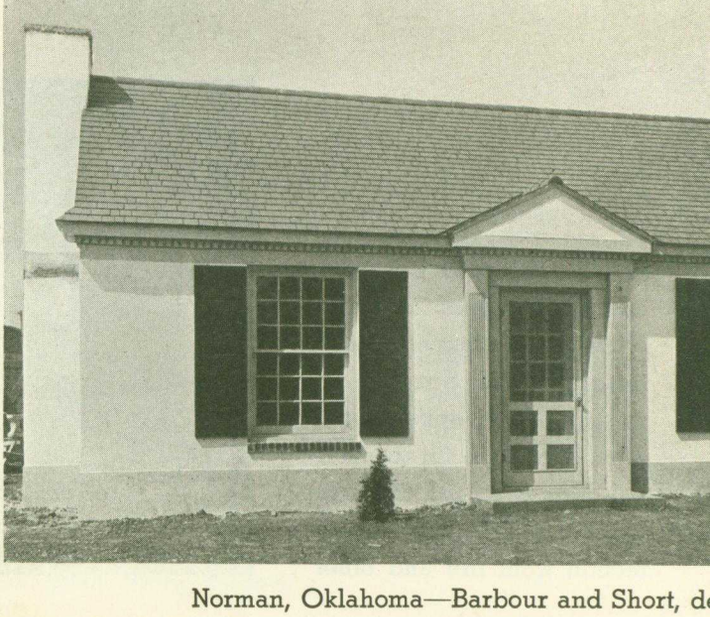
Living room of concrete
home at Yonkers, N. Y.



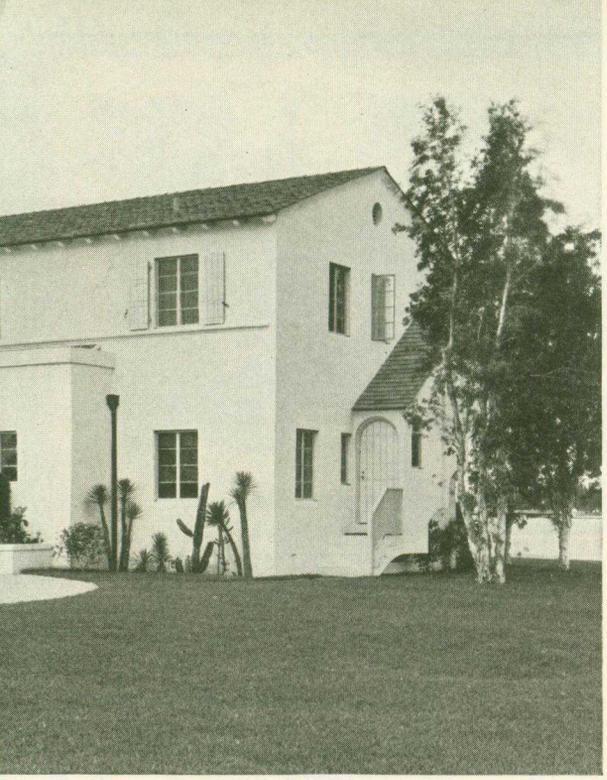
Silver Springs, Md.—John J. Earley, designer

LaGrange, Illinois—Wm. Joern and Sons, designers

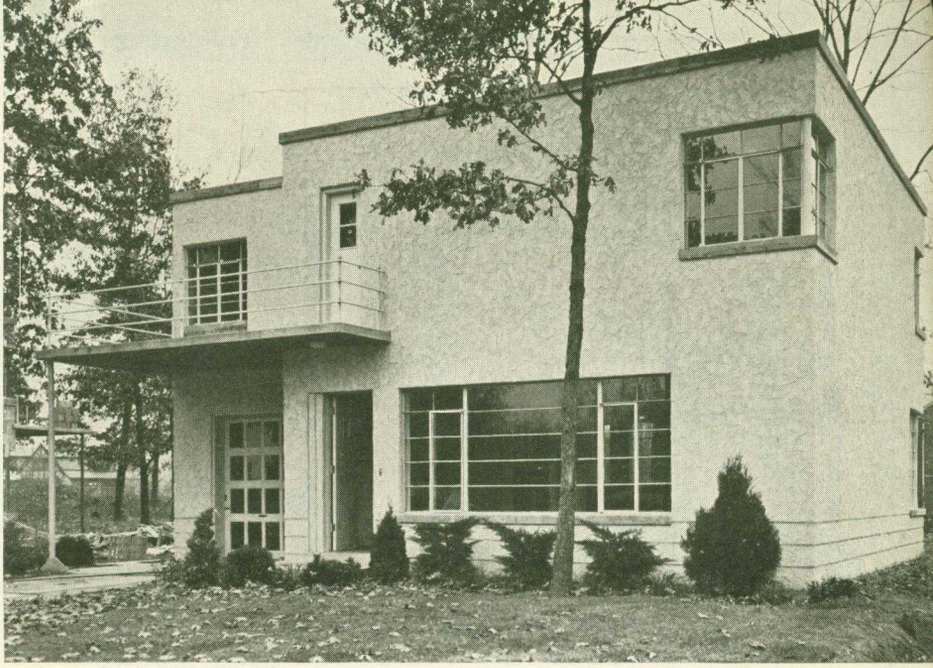




Norman, Oklahoma—Barbour and Short, d



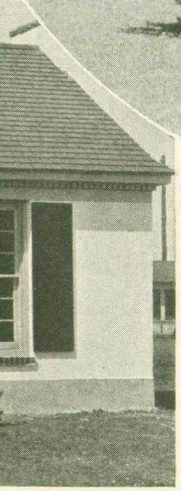
Miami Beach, Florida—R. De C. Weakley and
. B. Knight, designers



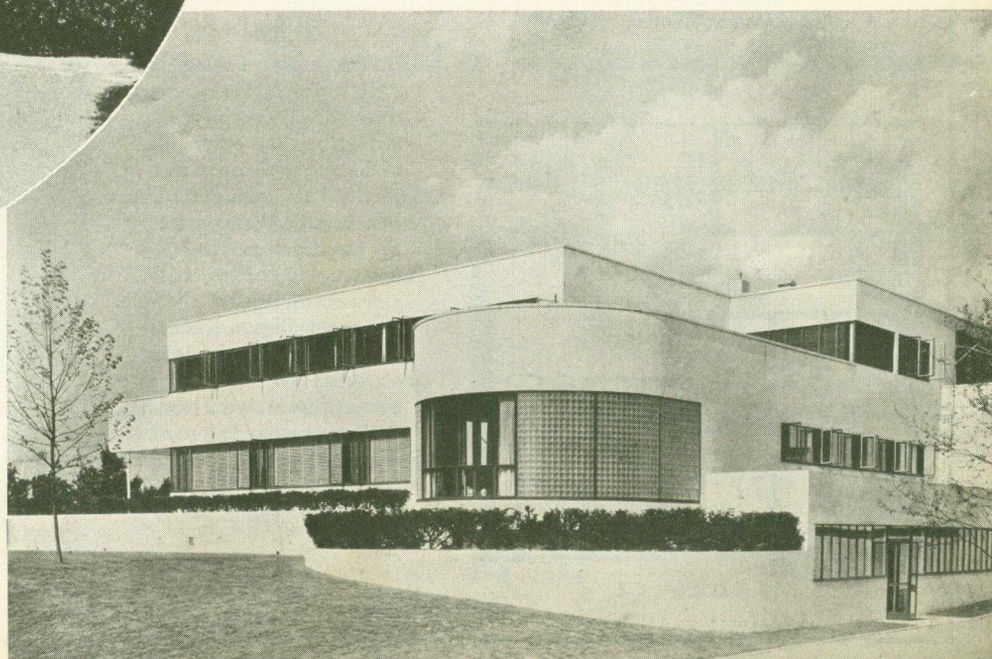
Toledo, Ohio—Britch and Munger, designers

Bedroom of Teaneck, N. J., concrete house

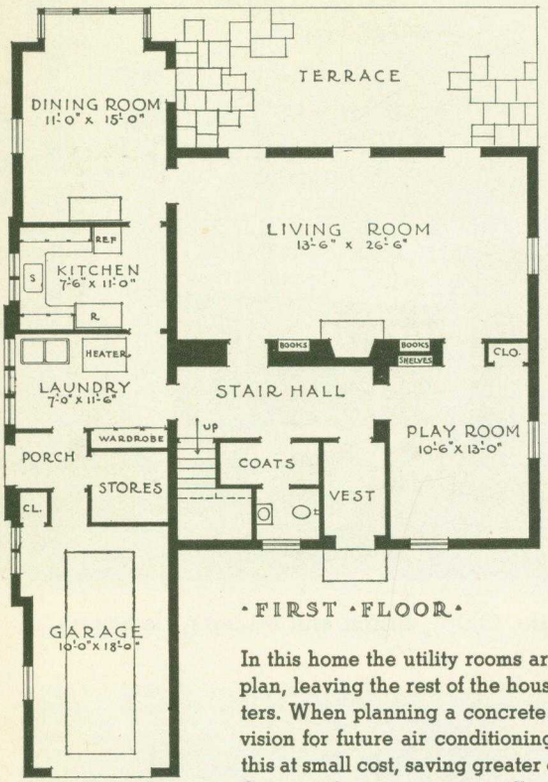
Long Beach, Calif.—W. J.
McKee, designer, Los Angeles



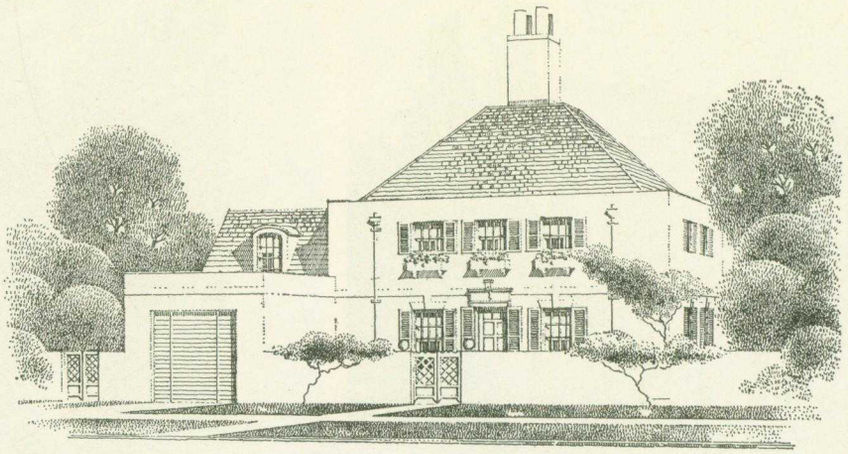
Mount Kisco, New York—
Edward D. Stone, designer



ers

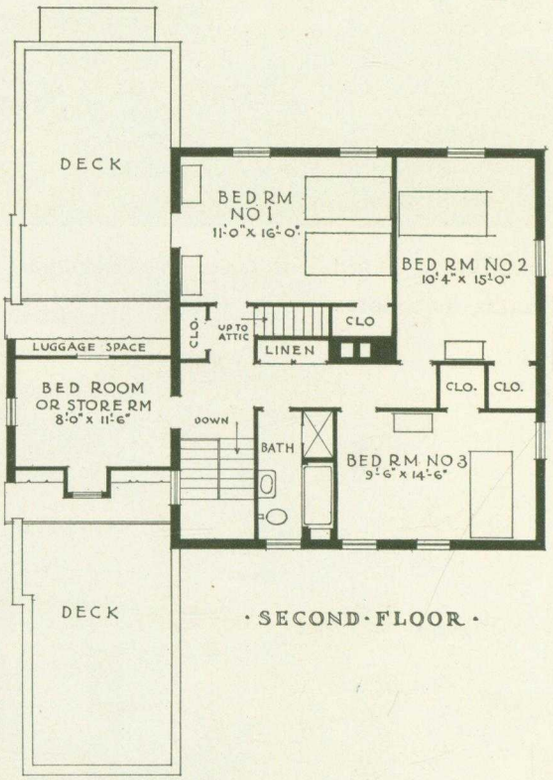


·FIRST·FLOOR·

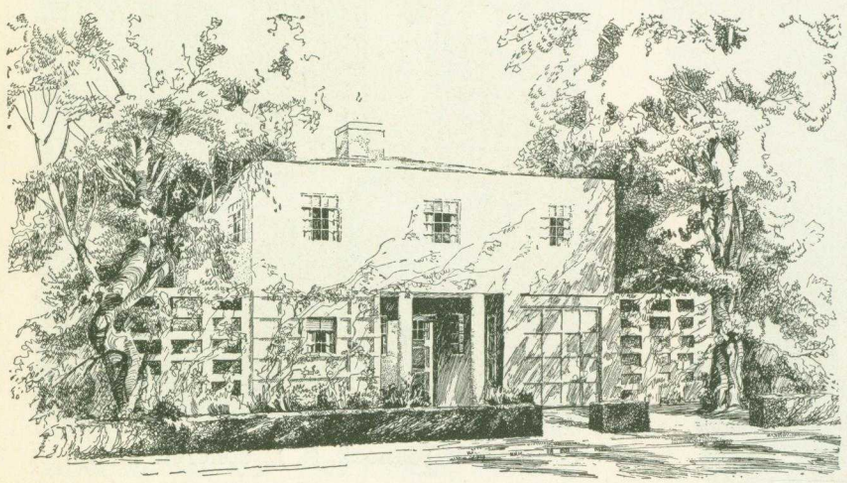


Hudson and Hudson, designers
802 Rand Building
Buffalo, New York

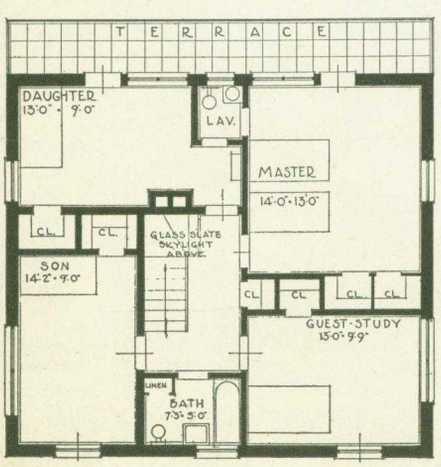
In this home the utility rooms are confined entirely to one side of the plan, leaving the rest of the house free for living and recreation quarters. When planning a concrete house, the builder should make provision for future air conditioning; for it is a very simple matter to do this at small cost, saving greater expense and annoyance in the future. Concrete homes are especially adapted to efficient air conditioning.



·SECOND·FLOOR·

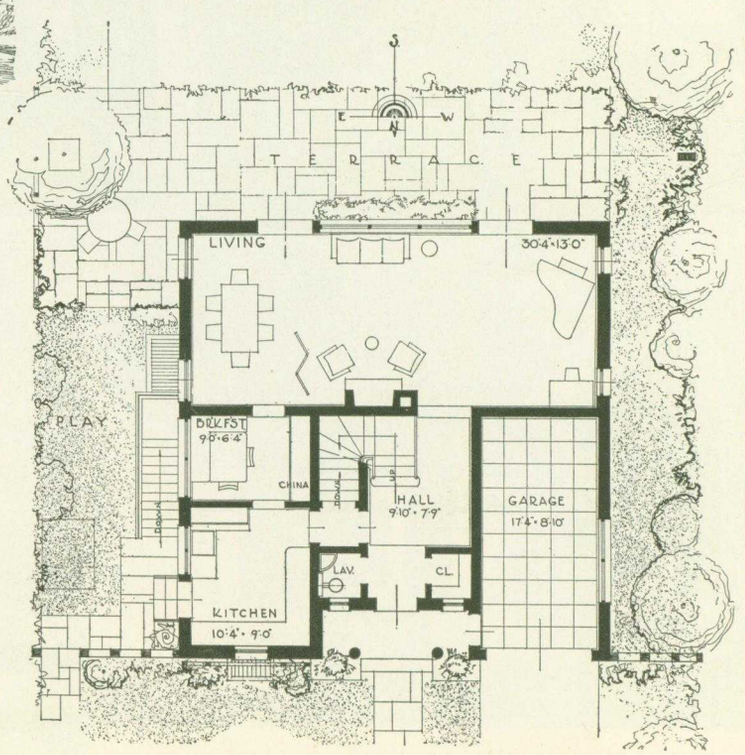


Harry Jones Harman, designer
4098 Western Avenue
Western Springs, Illinois

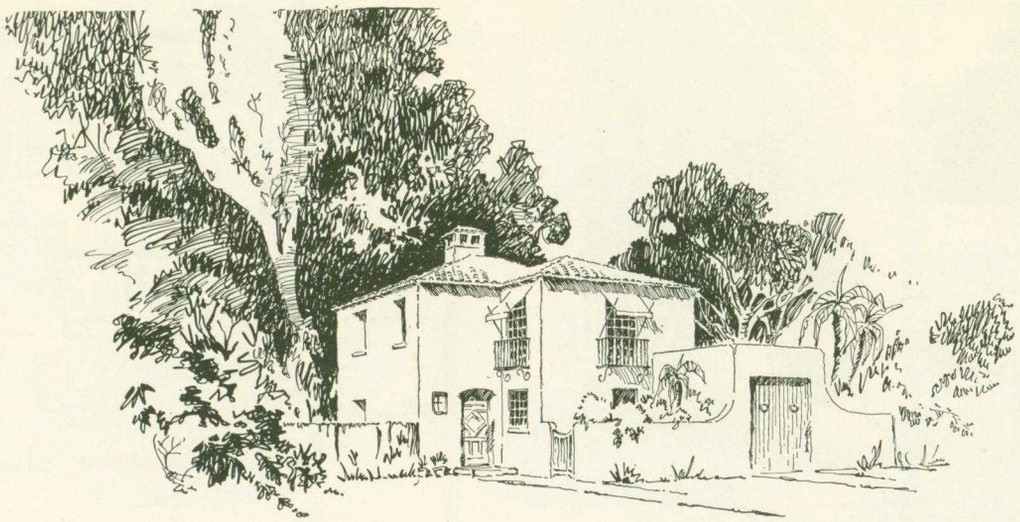


SECOND FL

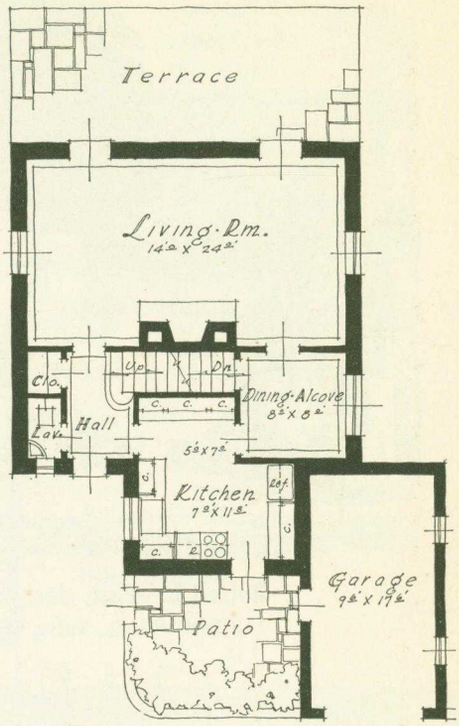
In this design, modern in style and plan, the garage door and the corresponding wall on the other side of the entrance are of similar motifs, completely blending the garage into the house design. The concrete trellis flanking both walls continues this effective motif. Design touches such as these can be done so well in concrete because the material lends itself completely to formed motifs of any degree of complexity.



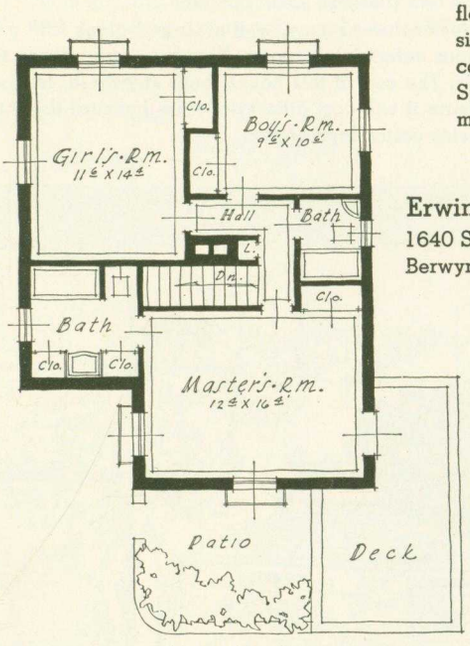
(For use of these plans see page 4.)



A Spanish type home with pleasant canopied balconies, concrete tile roof and walled patios. First floor plan is most happily designed for roominess and simplicity. Colors that can be so easily applied to all concrete surfaces make such colorful designs as the Spanish most economical to produce in firesafe material.

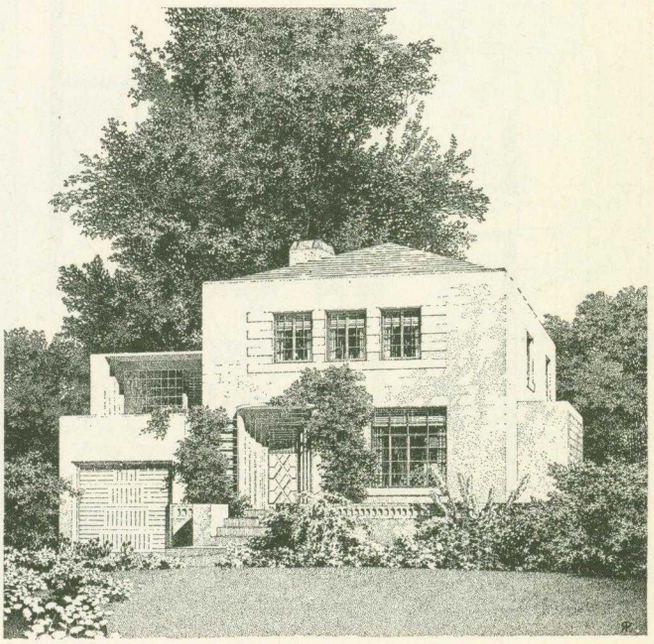


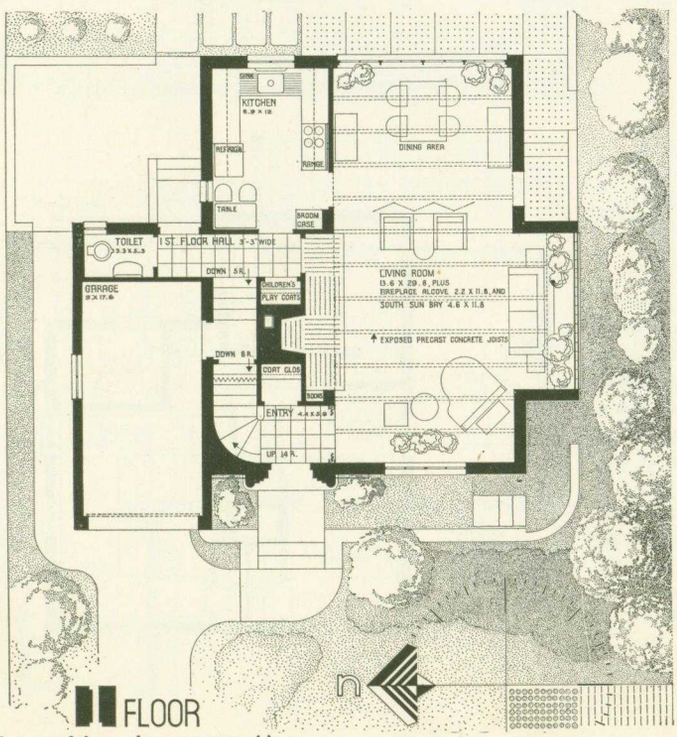
· FIRST·FLOOR



· SECOND·FLOOR ·

Erwin Kral, designer
1640 South Cuyler Ave.
Berwyn, Illinois



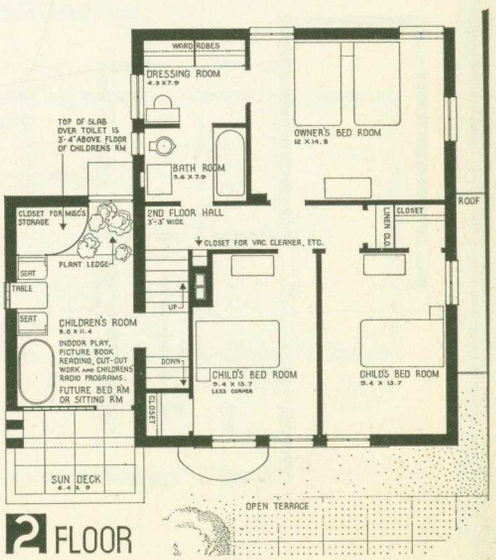


1 FLOOR

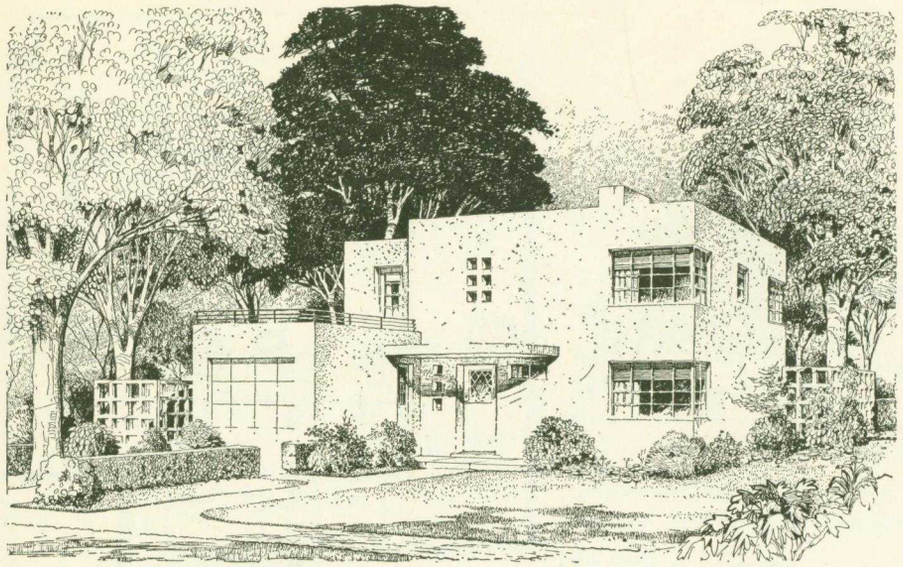
(For use of these plans see page 4.)

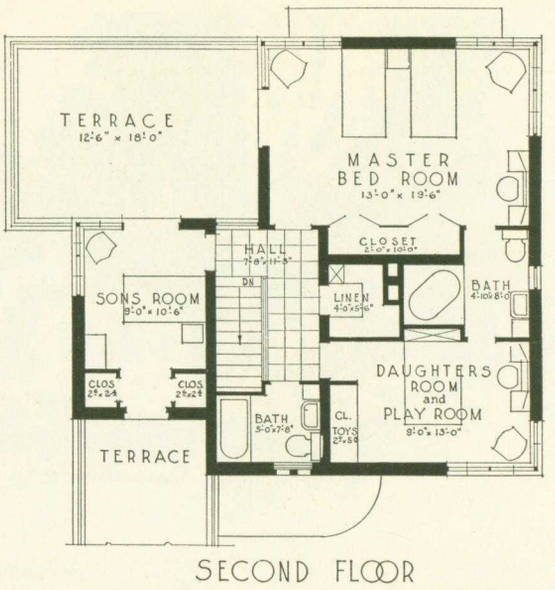
Richard Powers, designer
1002 Dundee Road
Northbrook, Illinois

The freedom of design so characteristic of concrete is expressed in the livable plans and commanding exterior beauty of this modern house. The use of precast concrete floor joists (see living room plan) provides a rigid, firesafe floor and, at the same time, a charming beamed ceiling in the room below. Exposed joists, painted or stained, are popular in new houses.



2 FLOOR

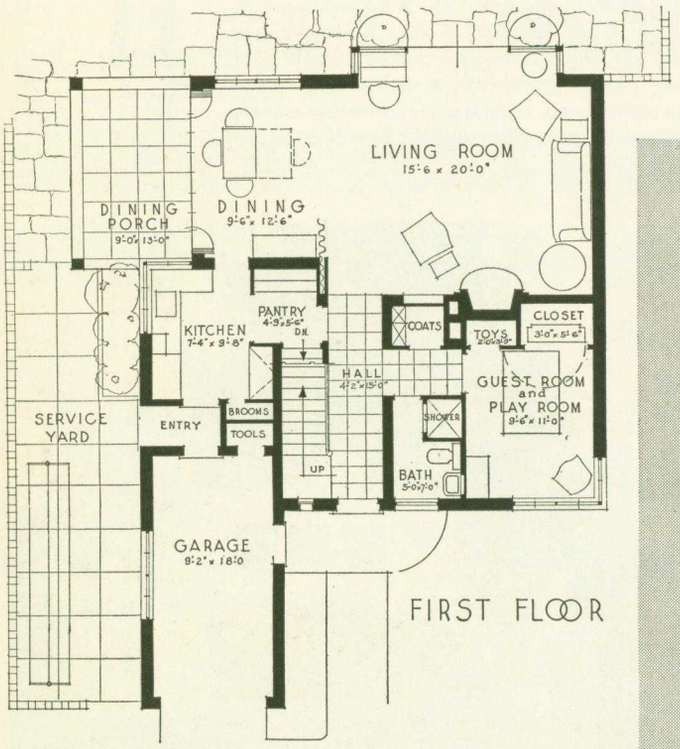




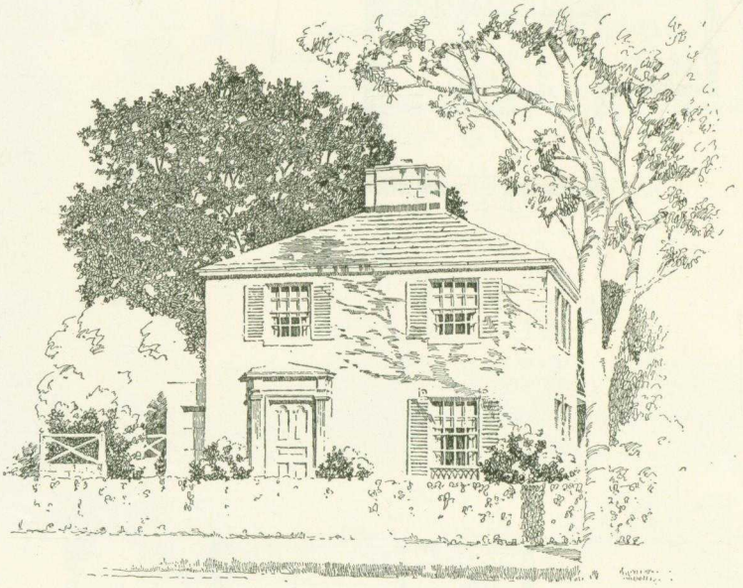
SECOND FLOOR

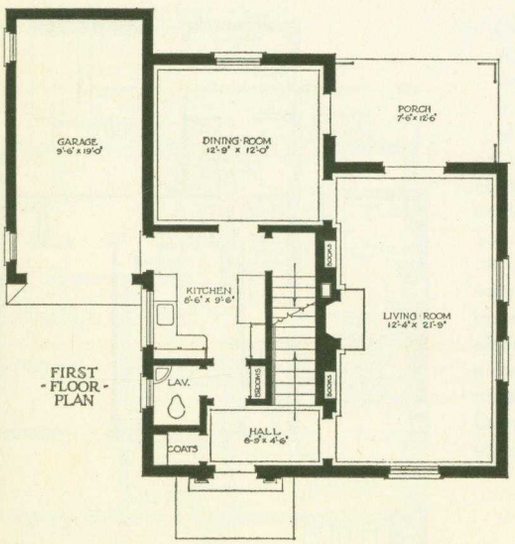
Robert E. West, designer
115 East 18th St., Tulsa, Oklahoma

This bright modern exterior encloses roomy, well arranged plans with particular emphasis on spacious entertaining rooms. Note the dining porch for spring and summer nights. The cost of this house, built anywhere, is moderate, and through the years it will cost little to operate because the durability of concrete eliminates costly depreciation.



FIRST FLOOR

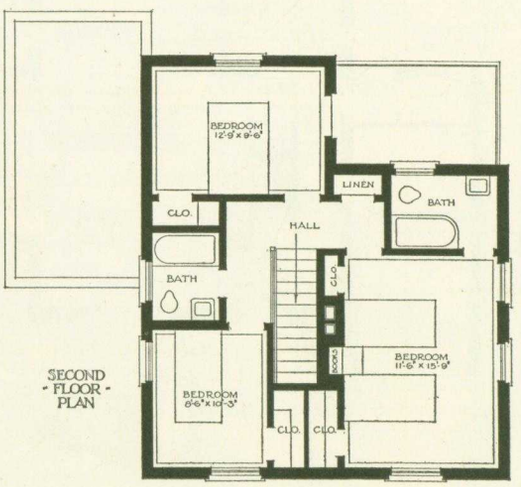




FIRST - FLOOR - PLAN

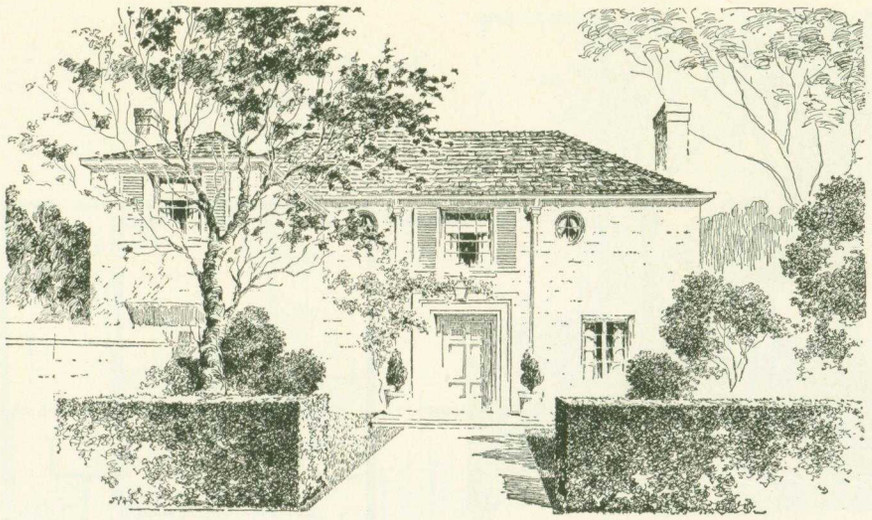
C. Wilmer Heery, designer
222 West Hill Street
Decatur, Georgia

The dignity of old established styles, such as this adaptation of Southern Colonial architecture, captures the fancy of many home builders. This design carries the garage to the side and rear but still definitely connected with the home for convenience. The swing to concrete for homes of all architectural styles is proof that beauty as well as continued low cost operation is a recognized advantage of this material.

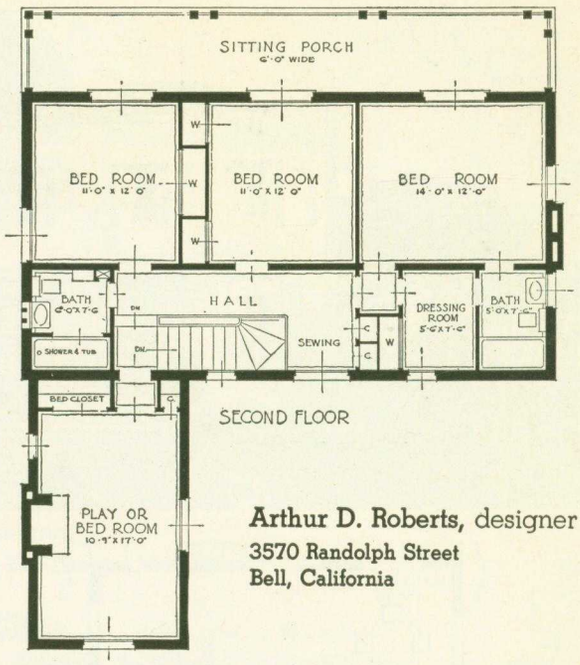


SECOND - FLOOR - PLAN

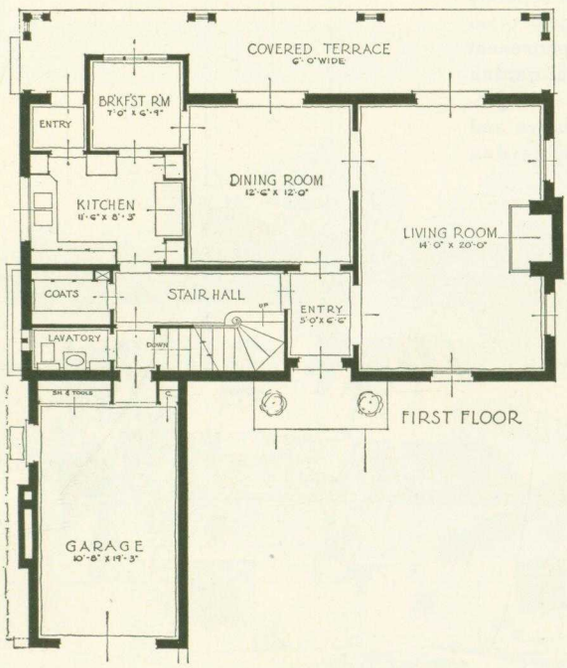
(For use of these plans see page 4.)

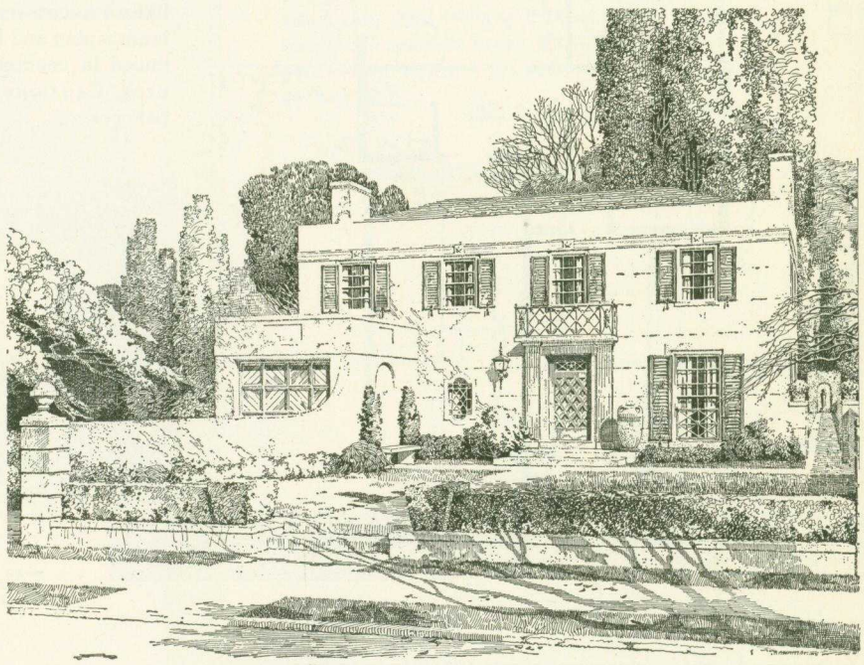


A solid, substantial house of conventional design suitable for town or country. Cement asbestos shingles, durable concrete walls and rigid reinforced concrete floors give this splendid home firesafety and long life at low cost. The plan includes both a separate dining room and a breakfast nook.

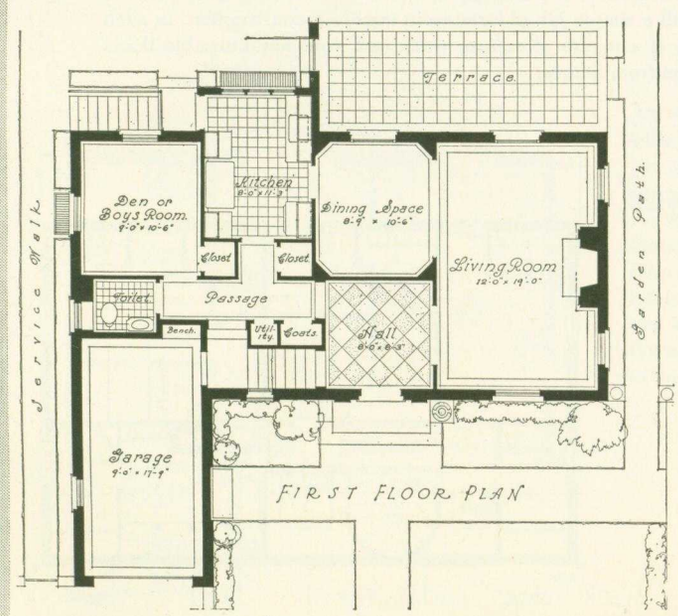


Arthur D. Roberts, designer
3570 Randolph Street
Bell, California

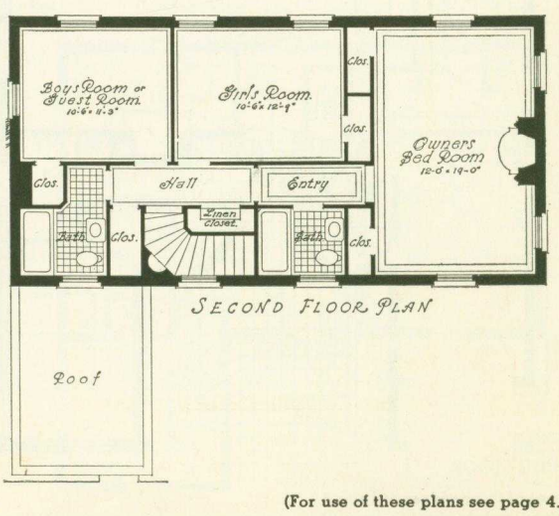




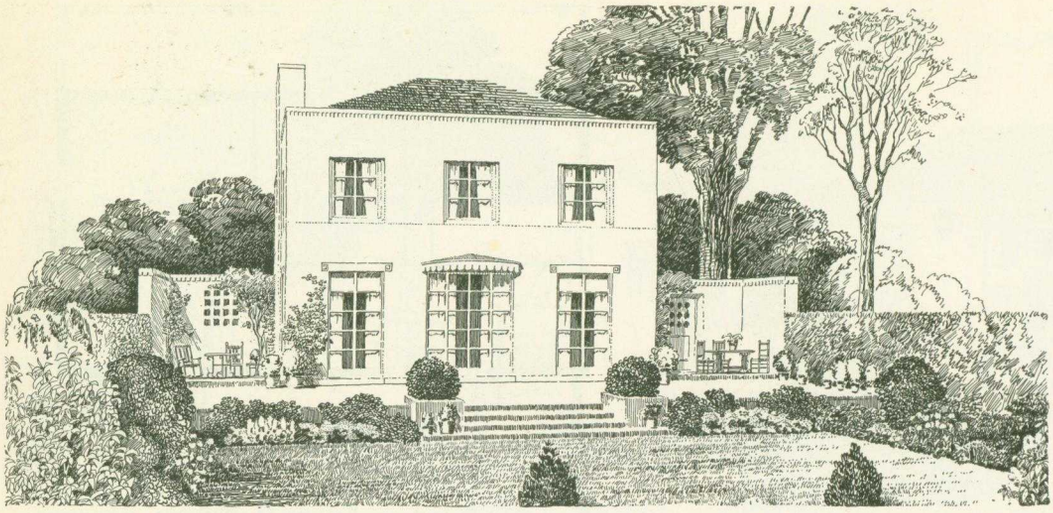
Joseph A. Parks, designer
4704 Chestnut Street
Bethesda, Maryland



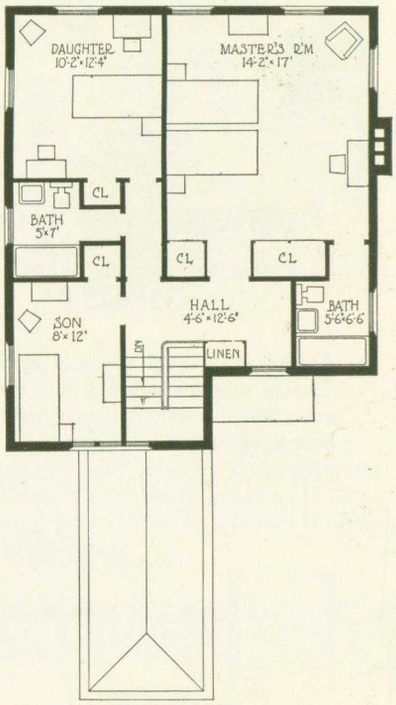
A dignified urban home done in the traditional style, but with modernized lines to fit today's scene. The low hip roof suggests efficient use of inside space, and the broad concrete surfaces suggest strong, massive walls. The economy of concrete lies in its strength and durability, protecting the house against costly repairs and preserving its first beauty.



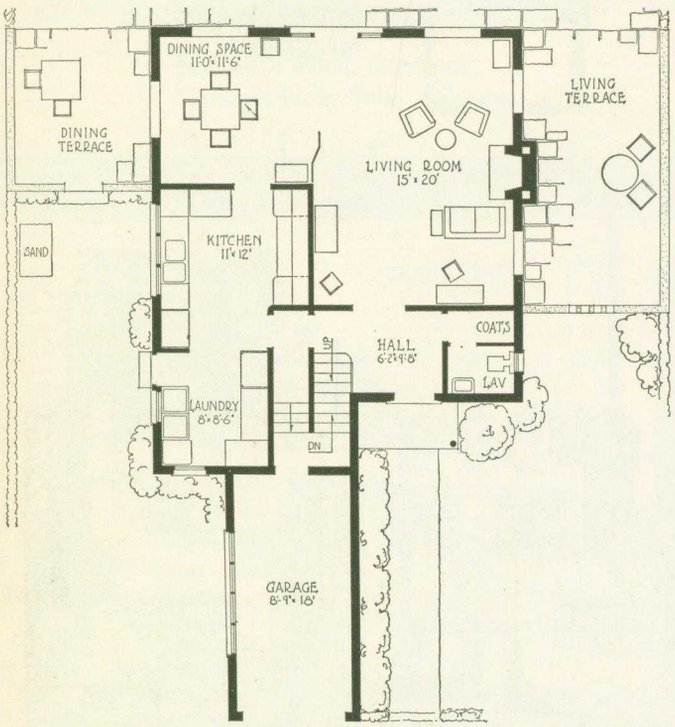
(For use of these plans see page 4.)



Jonas Pendlebury, designer
18 East 48th Street
New York, New York



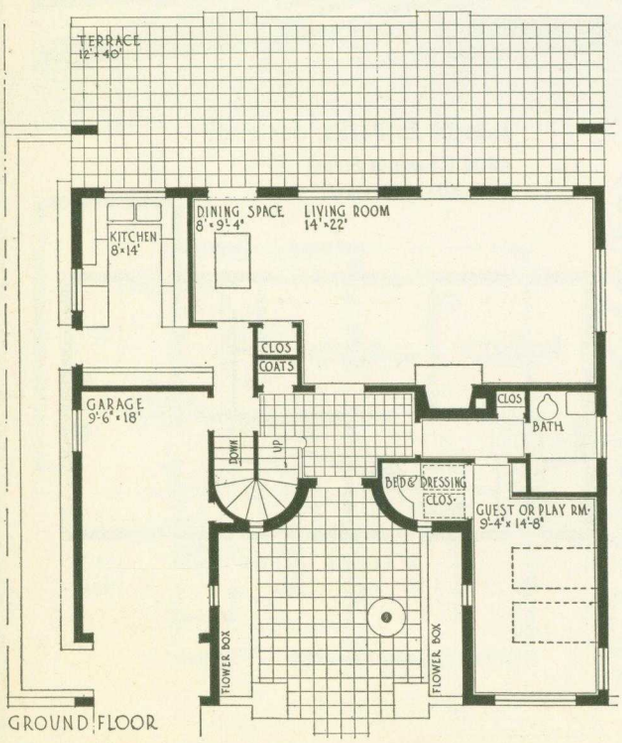
SECOND FLOOR PLAN



FIRST FLOOR PLAN

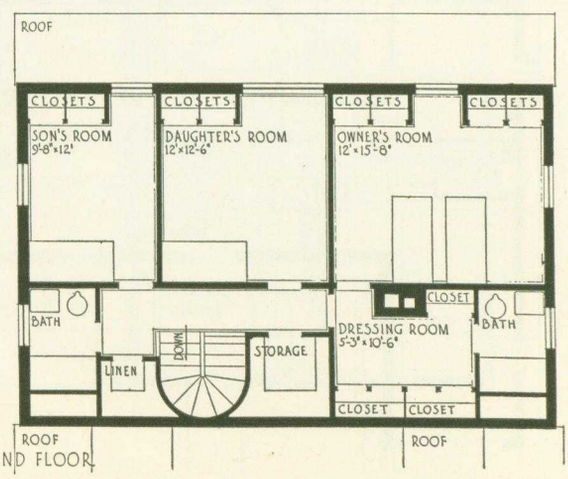
An outdoor dining room and an outdoor living room flank the garden facade of this square type house. The architect has foreseen the possibilities of a beautiful garden pool, also built of concrete to harmonize with the house and its ornamental porch walls. Every permanent fixture necessary to beautiful garden landscaping and furnishing can be produced in concrete—flower boxes and urns, flagstone walks and garden benches.

The architectural details which give unusual charm to this home—the curving walls of the entrance, the circular windows and the engaging pitch of the roofs—are all a simple job of forming in concrete construction. In such homes firesafety is a matter of course; walls and rigid non-burnable floors protect the house from flames.



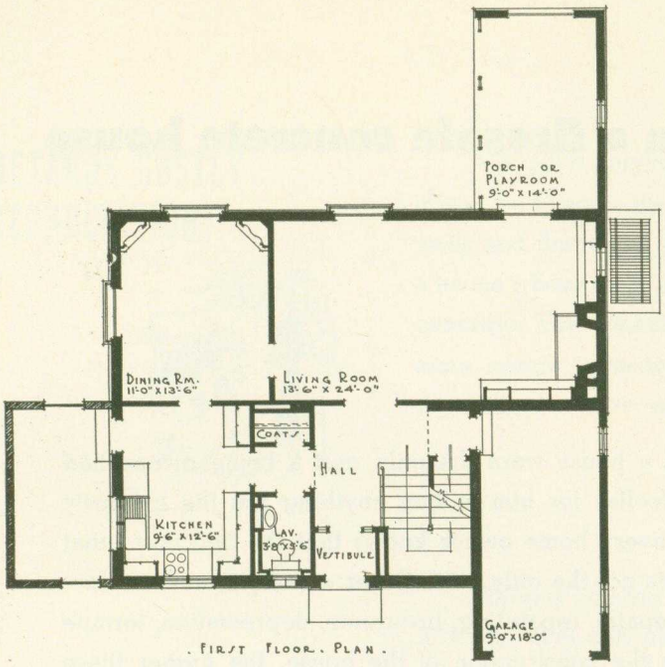
GROUND FLOOR

Richard Haviland Smythe,
designer
681 Fifth Avenue
New York, New York

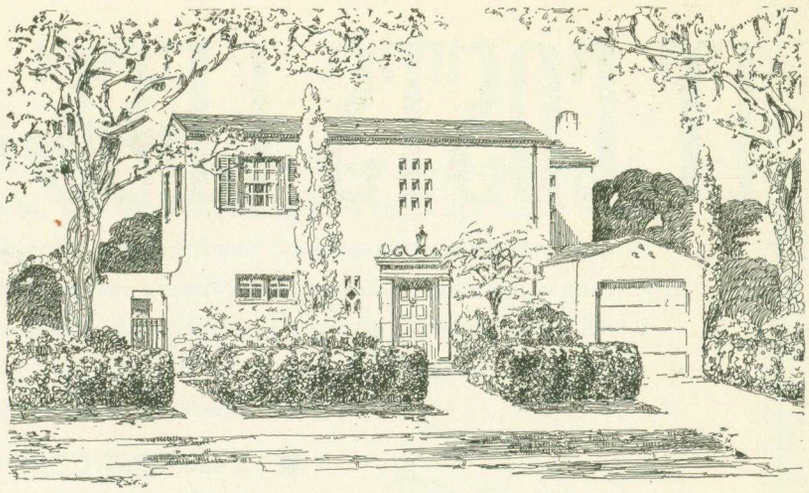


SECOND FLOOR

(For use of these plans see page 4.)

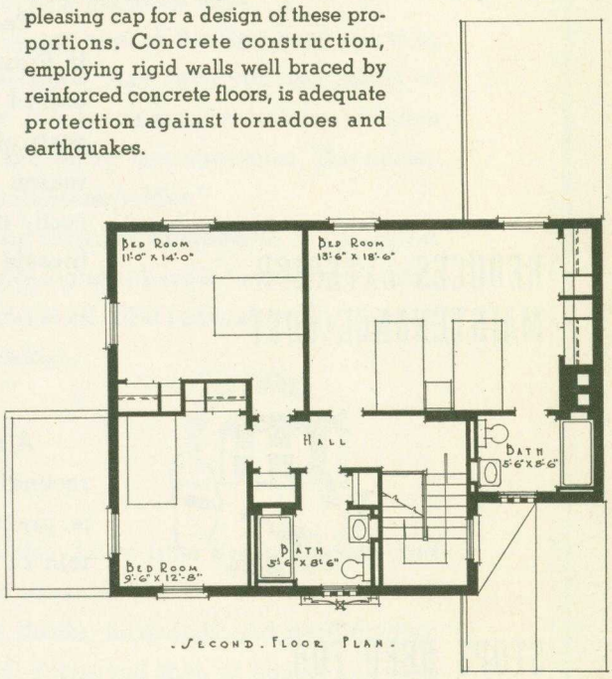


. FIRST FLOOR . PLAN .

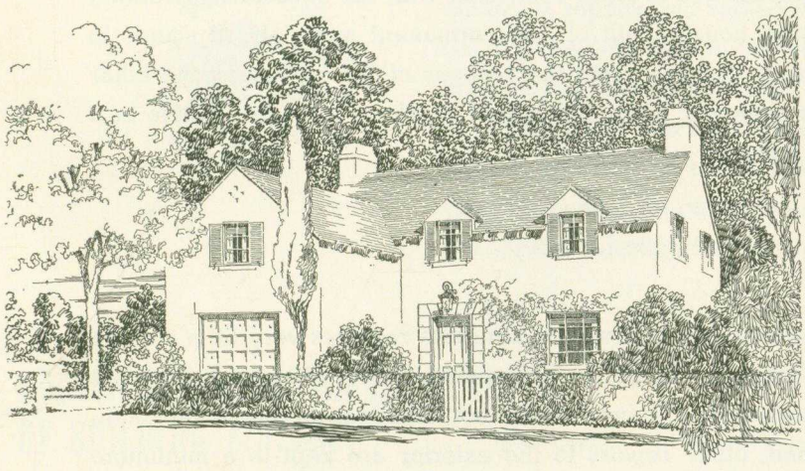


Leon H. Hoag, designer
28 Sherman Avenue, East Orange, New Jersey

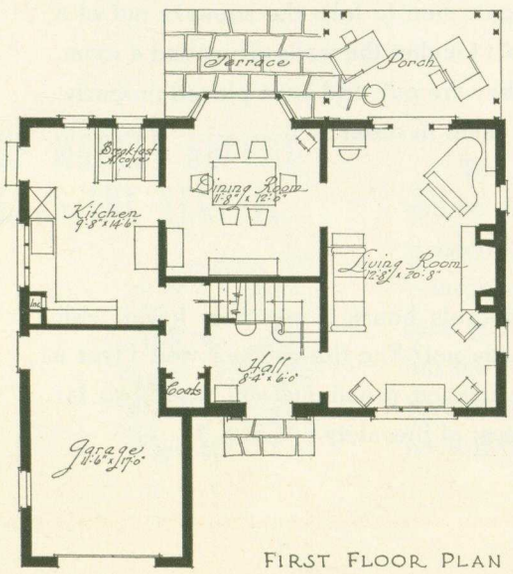
Ornamental detail used on this splendid home is confined to simple grilles in the concrete walls and shuttered windows. The low pitched roof is a pleasing cap for a design of these proportions. Concrete construction, employing rigid walls well braced by reinforced concrete floors, is adequate protection against tornadoes and earthquakes.



. SECOND . FLOOR PLAN .

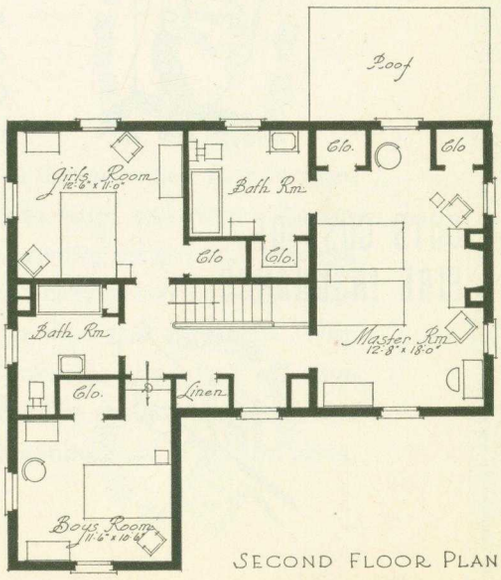


Daniel E. Shea, designer
124 Byers Street
Springfield, Massachusetts



FIRST FLOOR PLAN

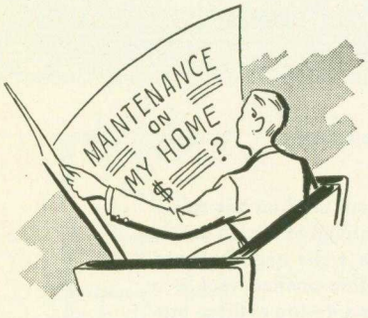
An early American design, but with most modern interiors, this beautifully dignified home will last for years in concrete without losing its first trim, clean beauty. Storm, wind, flood, fire could have little effect on this sturdily built home whose very lines suggest the strength and ruggedness of the pioneers who first built houses of this design.



SECOND FLOOR PLAN

(For use of these plans see page 4)

IT COSTS LESS to live in a firesafe concrete house



■ If the FIRST COST of a house were the only cost a home owner had to consider, it would be foolish for him to buy anything but the cheapest kind of construction. But every home owner knows that the first cost—that of erecting the building—is not the only cost. Other expenses must be provided for—maintenance, repairs, repainting, insurance, depreciation, termite damage. The less durable the construction of the house, the higher these other expenses are certain to be.

People who build burnable houses because it costs slightly more to build in firesafe construction suffer expensive illusions of economy. The additional cost of firesafe construction is small compared with the constantly mounting costs of maintaining houses built of less permanent materials. It stands to reason that materials that can resist the ravages of fire also resist the other costly destructive elements. Here is the story of why it costs less to live in a firesafe concrete home.

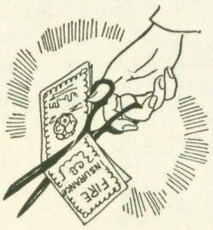
REDUCES EXTERIOR MAINTENANCE COST

A fine, permanent exterior such as concrete requires very little surface reconditioning. Therefore, the outlay for repainting every two or three years is practically eliminated. Concrete does not disintegrate under hot sun, rain or frost; hence, other repairs to the exterior are kept to a minimum.

STOPS NEED FOR INTERIOR REPAIRS

Strong, rigid walls and floors of concrete minimize the chance of cracked plaster, sagging and warping floors, gaping baseboards and sticking windows and doors. You never have to hire repair men to take the squeaks out of a concrete floor or to raise the floor up so it touches the walls all around a room. Concrete walls and floors stay where they are put, and once placed properly, there is no expense necessary to keep them in order.

CUTS COST OF FIRE INSURANCE



The cost of insuring a firesafe concrete house is naturally lower than on a combustible type of house—and why not? The fire risk is lower. Over a period of years, this saving in fire insurance premiums will, itself, go far toward paying the original additional cost of firesafety.

RETARDS COSTLY DEPRECIATION

A house is only new when it is first built. The older it gets, the less valuable it may be to someone else. This depreciation may be rapid in a house whose walls and floors are subject to wear, rot and disintegration, and very slow in a house whose walls and floors are of permanent, durable construction such as concrete. The concrete house, therefore, has a greater lasting value. It is a more secure investment from the date of its erection because of its great durability and low maintenance expense.

PROVIDES COMPLETE TERMITE PROTECTION

There is nothing in the firesafe concrete house, from foundations to chimney cap, that can be eaten and destroyed by termites. The price of termite damage may run into hundreds or thousands of dollars. The U. S. Department of Agriculture in Leaflet No. 31, TERMITES IN BUILDINGS, says:

"A few hundred dollars additional (2 per cent of the first cost) spent in the beginning in proper building construction may save you thousands of dollars in repairs and replacements later. It is much simpler to keep termites out of a building than to get rid of them and repair damages after. The necessary repairs may be too costly for the small householder."

This 2 per cent additional cost for termite protection is included in the first cost of the firesafe concrete house; hence, termite protection costs the owner of a concrete house nothing at all. And remember, the termites are rapidly infesting the entire United States.

ADDITIONAL ADVANTAGES OF BUILDING FIRESAFE

The owner of a firesafe concrete house, aside from fire protection and low maintenance costs, has these further advantages:

Structural stability: protection from floods, tornadoes and earthquakes.

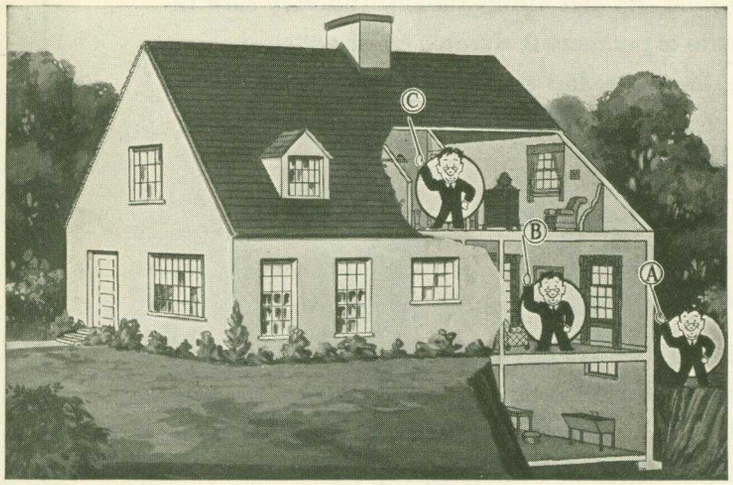
Higher resale value: a house so well preserved that, at almost any time after erection, it is a desirable piece of residence property.

Lasting beauty: a house that keeps its charm, beauty and freshness so that its owner can always point to it with pride.

THE MODEST BUDGET REAPS THE BENEFIT

The belief that quality construction, such as that provided by concrete, can be afforded only by wealthy people who build large, extravagant homes is erroneous. The cost of permanent, firesafe construction for any type of house —large or small—is very little more than for ordinary construction, and the savings it makes in maintenance are far greater than this difference. Who but the small home owner can better afford a concrete home that will **save him years of worry and continuous expense?** The small home owner can have as well constructed a home as his wealthy neighbor, and at his own price.

HERE'S HOW a concrete house is built



Three important features distinguish the firesafe house:

A—CONCRETE WALLS

Built of concrete masonry units, reinforced concrete or large prefabricated sections. Wide choice of color and texture to suit any architectural style.

B—CONCRETE FLOORS

Rigid, sagproof, firesafe, comfortable, with the beauty and strength of floors in modern hotels and large apartments. Select any floor covering you desire—hardwood, carpeting, linoleum, rubber tile, terrazzo or colored concrete marked off in attractive patterns, waxed and polished.

C—FIRESAFE ROOF

Pitched roof has cement asbestos shingles or concrete tile covering with the underside of rafters fireprotected with metal lath and portland cement plaster. Flat roofs use any standard reinforced concrete construction.

■ Concrete walls, floors and roof make the firesafe house, but there are several methods of producing each of these to meet any architectural requirements.

CONCRETE MASONRY—COURSED

1. Among the several types of concrete masonry walls, three are illustrated below. Regular coursed concrete masonry (Fig. 1) is the most common form of concrete masonry wall, suitable to both modern and period styles of architecture. Here the insulation is furred out from the inside face to make familiar plaster walls suitable for painting or wall papering. The exterior may be overcoated with portland cement stucco or given a finish of portland cement paint in a choice of colors.

HOLLOW DOUBLE WALL

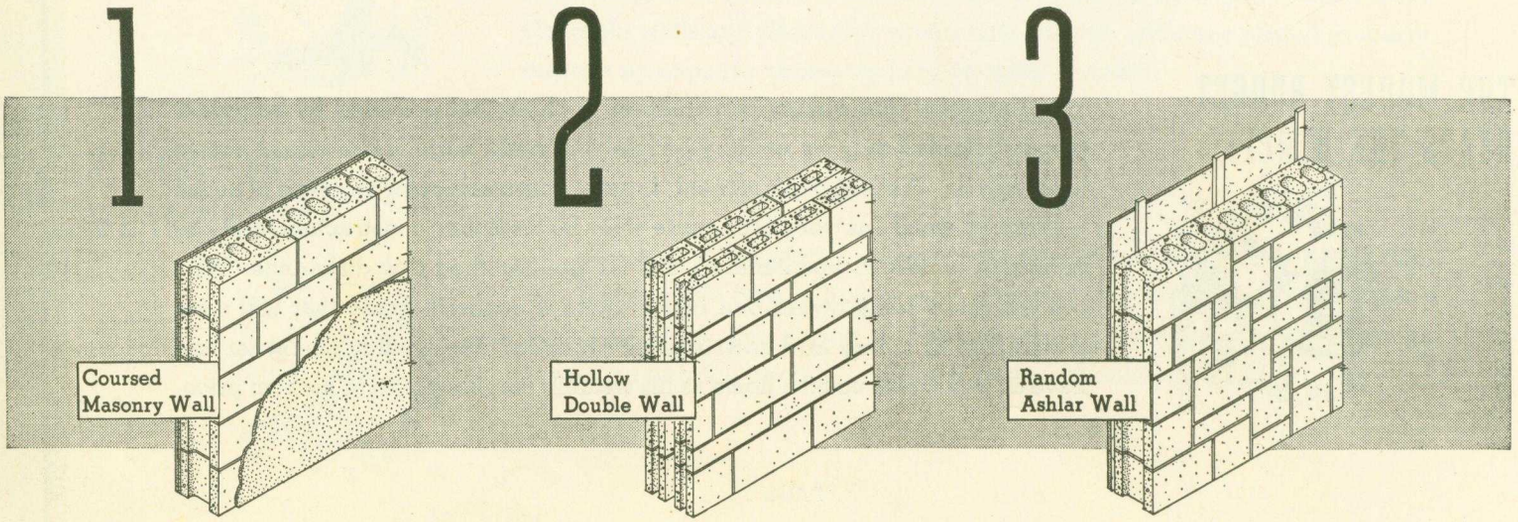
2. By applying insulating materials in the hollow sections between concrete masonry walls, both the exterior and interior surfaces may be exposed, eliminating the need for plaster on the interior. The popularity of masonry interiors, which require very little decoration, has increased rapidly with the development of this type of wall system (See Fig. 2).

RANDOM ASHLAR

3. Through the use of several sizes of concrete masonry units (Fig. 3), charming patterns may be designed for the exterior walls. Here it is desirable to apply insulation on the inside surface for plaster finish. The exterior is given added interest by the use of different colored masonry units, or by the use of colored portland cement paint.

REINFORCED CONCRETE—SOLID

4. Reinforced concrete construction—rigid, solid walls and floors—presents a somewhat different group of wall types. The solid wall, of the proper thickness, is built up in forms made of metal or wood. The exterior surface, generally smooth, becomes the finished wall surface after application of cement paint or treatment in one of the other ways described on page 31. Insulation is applied to the interior and becomes the base for plaster finish (Fig. 4).



HOLLOW DOUBLE WALL

5. The reinforced concrete hollow double wall (See Fig. 5), provides an insulating air space. This wall may be further insulated by filling the space with suitable materials. If the interior wall is molded against smooth or patterned form liners, it will require no plastering or other treatment, aside from painting, to provide beautiful, interesting walls.

RIBBED WALL

6. In the ribbed type of concrete wall construction (Fig. 6), the rigid insulation is applied to the face of the ribs as a plaster base, with suitable insulating materials filling the hollow sections. The interior finish is usually plaster.

PREFABRICATED UNITS

Several methods have been developed for building houses of wall sections fabricated in a factory or on the job. They are designed to fit together, providing walls having required structural strength, weathertightness and insulation.

CONCRETE FLOORS

The greatest single factor in home fire protection is the concrete floor. It prevents the upward sweep of flames which so often originate in the basement. Among several acceptable types of floors, three are illustrated here.

PRECAST CONCRETE JOIST

7. A new and rapidly developing type of concrete floor is made by placing a reinforced concrete slab over precast reinforced concrete joists (Fig. 7). The joists may be exposed, if desired, as a beamed ceiling, or may be enclosed by metal lath and plaster. The floor slab becomes an excellent base for any type of floor finish.

SOLID SLAB FLOORS

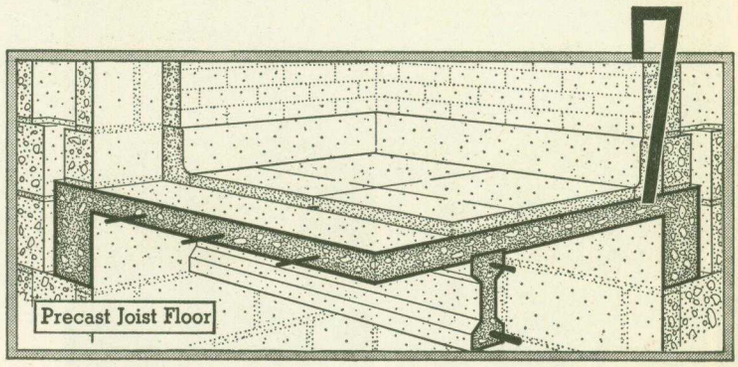
8. The solid slab (Fig. 8) is generally about 4 to 6 inches thick and is built of reinforced concrete. It provides a flat ceiling which may be plastered directly or decorated by painting. Any kind of floor finish may be applied over the concrete floor.

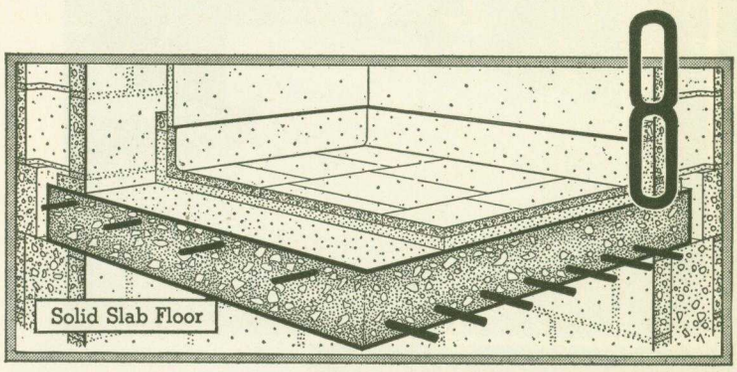
CONCRETE JOIST FLOORS

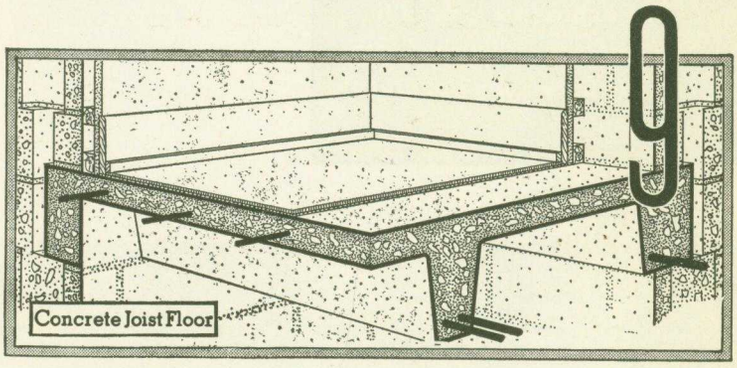
9. In this type of floor (Fig. 9), the joists and slab are cast at the same time, using metal or wood forms. The exposed joists make an attractive beamed ceiling.

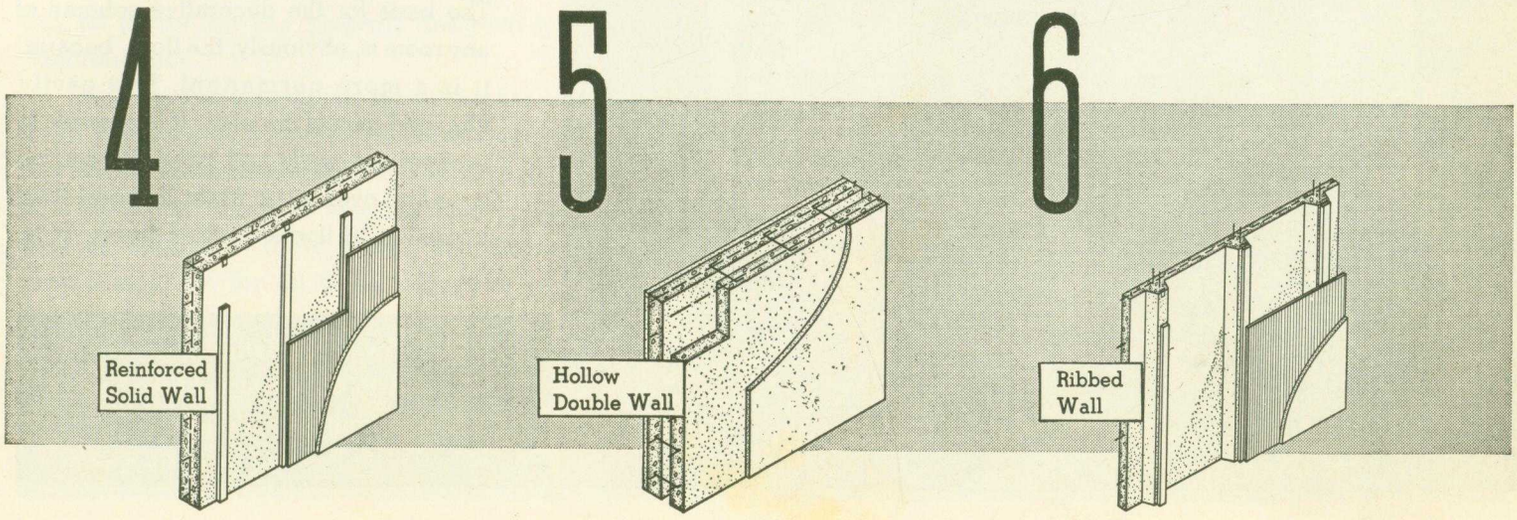
CONCRETE WALLS AND FLOORS ARE BEAUTIFUL

The beautiful effects obtained through the wise use of concrete walls and floors of various types are shown in the following pages illustrating exterior and interior features of firesafe concrete homes.

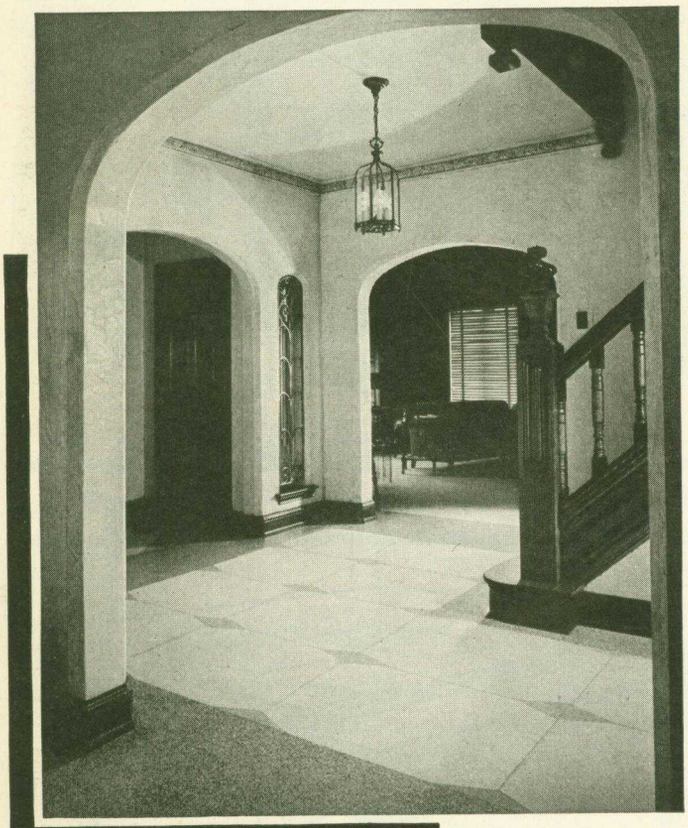








FLOOR FINISHES
for concrete floors



The entire first floor of this St. Louis home is finished with terrazzo in two tones of green and buff.

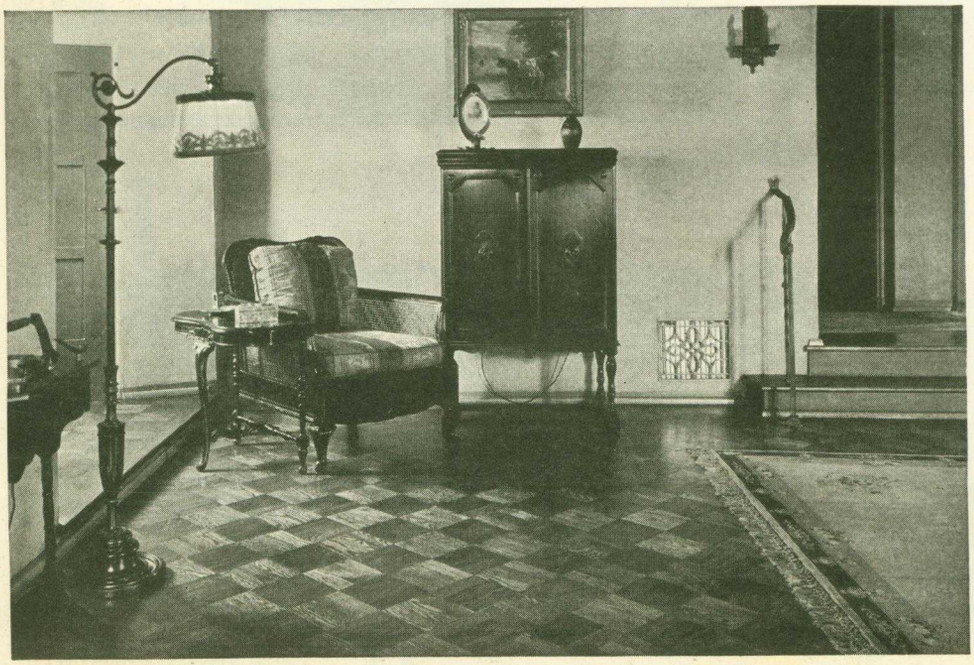
THE concrete floor offers a large range of possibilities for floor finishes. Concrete itself is an attractive floor when colored and marked into tile patterns and brought to a high polish. When the top surface is finished with terrazzo—concrete containing brightly colored marble chips in interesting patterns—most brilliant decorative effects are possible.

For those who prefer hardwood finish, the flooring is laid over the concrete without sacrificing firesafety; and it will be found to be a rigid, non-squeaking floor. Linoleum, of any quality or design, is popular as an all-over floor finish, some people using it in living rooms and dining rooms in combination with throw rugs. Linoleum may be cemented to the concrete floor, preventing curling or cracking. Other applied finishes such as rubber tile or cork are easily and effectively laid over concrete. Pads placed between the floor finishing material and the concrete structural floor will eliminate noise underfoot and provide more comfortable walking.

Concrete floors simplify decoration

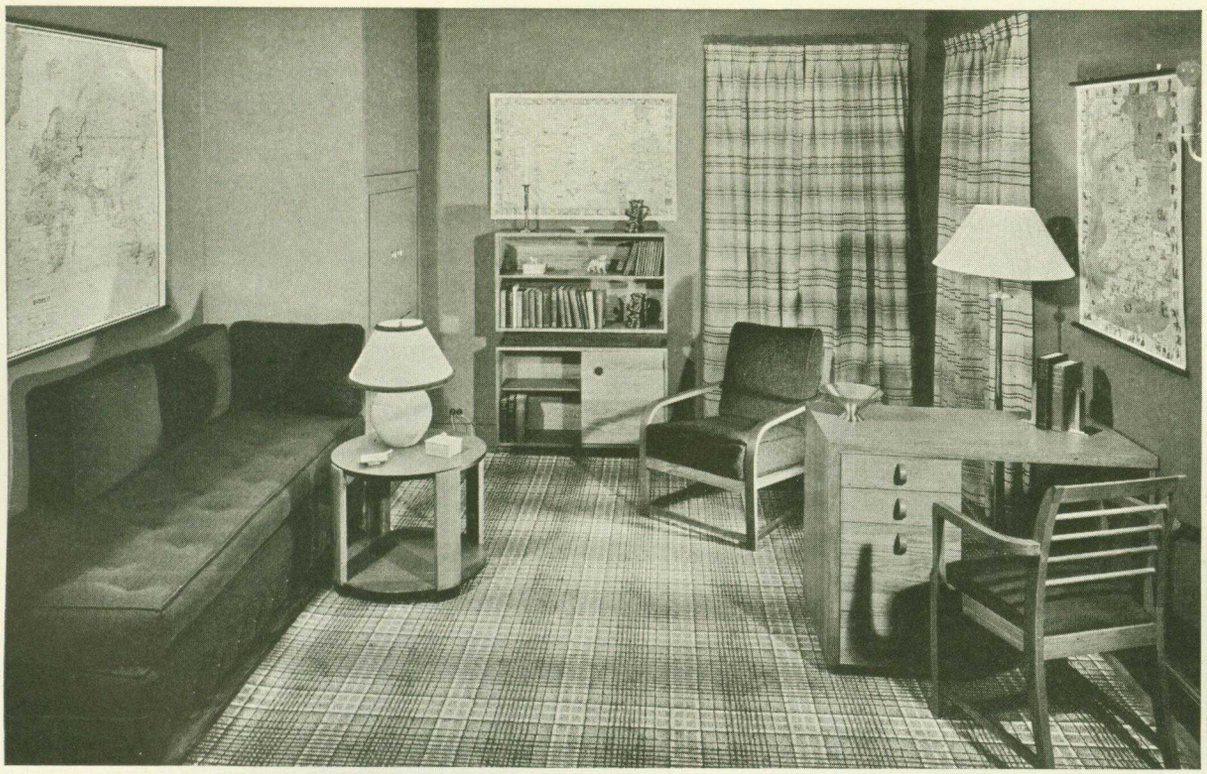
Plain or patterned broadloom carpeting in rich colors to match interior decoration and furnishings may be laid from wall to wall over pads laid directly on the concrete. This is one of the most economical and beautiful types of floor finish.

The great variety of floor finishes offered by concrete makes the problem of interior decoration less complicated than in houses of ordinary construction. The basis for the decorative scheme of any room is, obviously, the floor, because it is a more permanent, less easily changed part of the plan. It is possible to repaper the walls and paint the ceiling over and over again at far less cost than alteration to floors or floor finish. It is,



Blocks of polished hardwood cemented to concrete subfloors produce beautiful, firesafe floors.

Photo courtesy E. L. Bruce Co.



Colorful carpeting, placed over concrete, produces warm, beautiful floors to match interior decoration.

Photo courtesy Bigelow-Sanford Carpet Co., Inc.

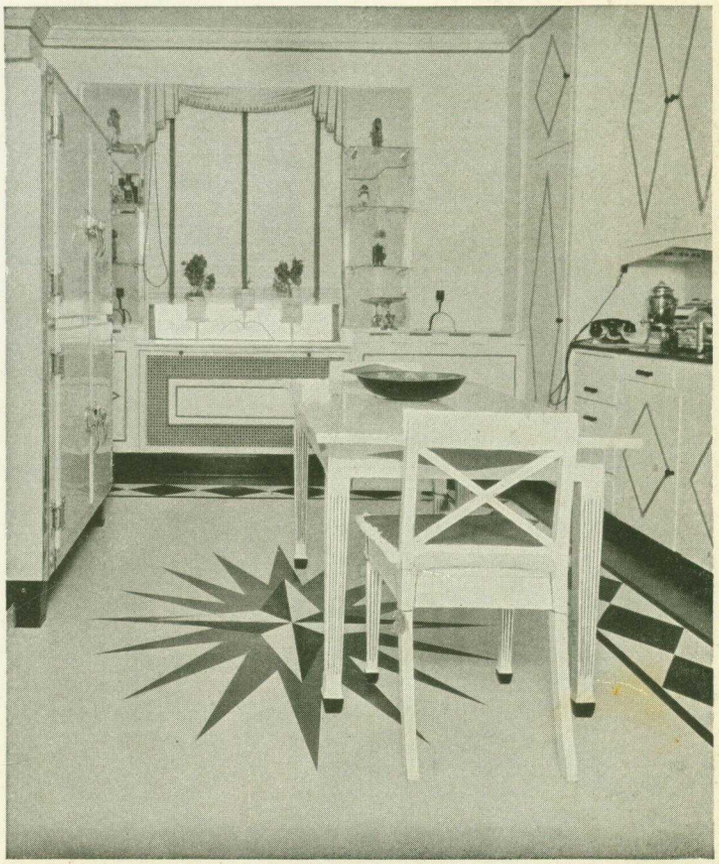
therefore, more economical to select a type of floor that will harmonize with any of a number of changing room decorations.

With concrete subfloors, each room may have a different floor finish. Linoleum is suitable for the kitchen and possibly for the dining room. Hardwood may be desired in the living room, but possibly some other finish would look better. Bath, bed rooms and hallways each present different decorative problems. When you build a concrete house, the subfloors are a part of the basic construction. Decision as to how they should be finished can be left until the house is completed or such time as a decorative scheme is being planned. Then the final floor finish can be selected and applied without altering the floor system.

Concrete floors are firesafe

Illustrated here are several types of floor coverings, all of which are particularly adaptable to concrete floors. It should be remembered that any type of floor covering can be placed on any properly designed type of firesafe concrete floor.

Sagless, non-warping or squeaking floors that offer the great firesafety of concrete are most desirable in present day homes where housework and repair bills must be kept to a minimum. The fact that any kind of beautiful finish may be applied to these strong, safe floors makes them most acceptable for all types and styles of houses. And it is easier to keep house in a concrete home because impenetrable walls and floors keep out sifting dust and dirt.



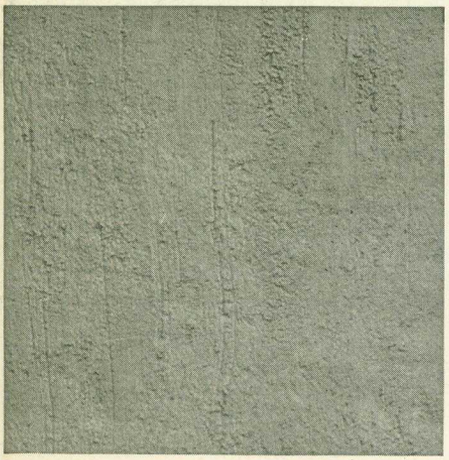
Another popular covering for firesafe concrete subfloors is linoleum, charming for use in every room of the home.

Photo courtesy Armstrong Cork Company

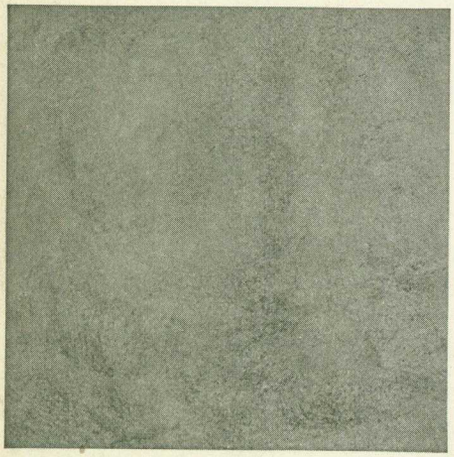
BEAUTY *and* VARIETY ..... in concrete walls

■ The plasticity of concrete and the ease with which it is formed and fitted to any kind of design makes this material particularly adaptable to many architectural styles. In concrete you have not only a choice of different kinds of wall construction with their individual characteristics, but a multitude of textures and colors to lend charm to the design. Three groups of wall finishes are illustrated here.

MODERN AMERICAN



COLONIAL



▪ STUCCO ▪

No other material offers the great variety of pleasing and effective exterior surface treatments that are obtainable with portland cement stucco. These qualities, combined with the ease and economy with which it may be applied, make it highly desirable as a finish for concrete homes. Portland cement stucco, however, should not be confused with other types of stucco, for it is, in reality, a form of concrete that is as strong and durable as the concrete wall itself.

Textures shown here are but five among many stucco surface treatments, all of which can be produced with equal facility by stucco craftsmen. The selection of textures here demonstrates their adaptability to various architectural styles, for each of them may be used for one or more styles as their names indicate. When choosing a texture, it is always important to select one that harmonizes with the architectural style of the house. For this, the advice of your architect is invaluable.

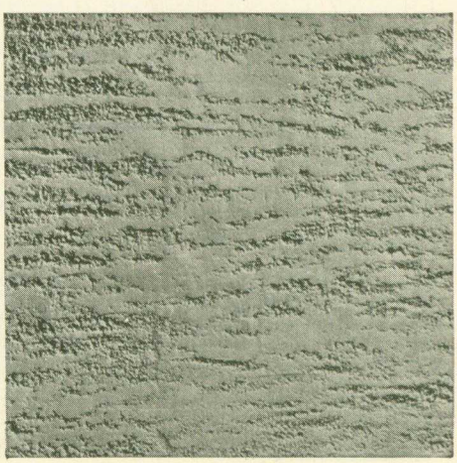
It should be remembered, also, that any texture may be given additional charm and individuality through the use of a wide selection of fast color finish coat stuccoes, offering the home builder an almost unlimited range of effects.

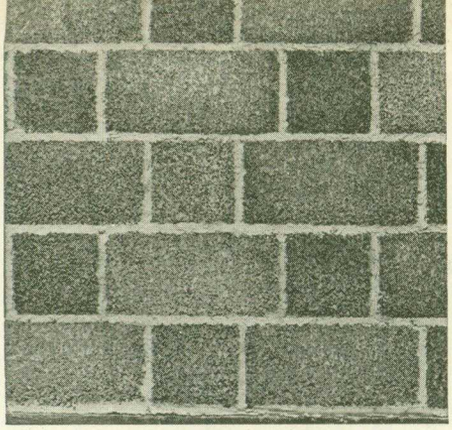
Always, the work of applying portland cement stucco should be put in the hands of experienced stucco contractors whose familiarity with the craft will assure most beautiful and lasting effects. Have your stucco contractor show you examples of his work.

ENGLISH COTTAGE

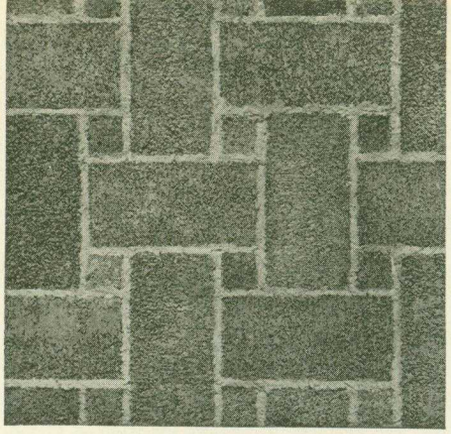
SPANISH

TRAVERTINE

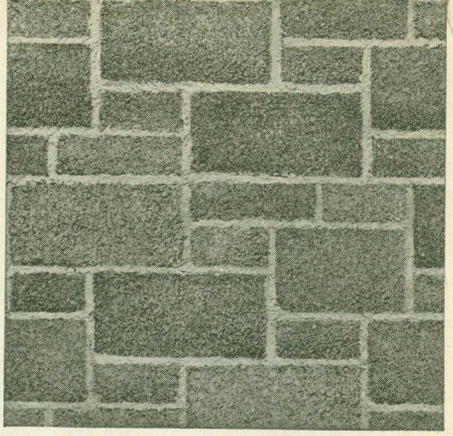




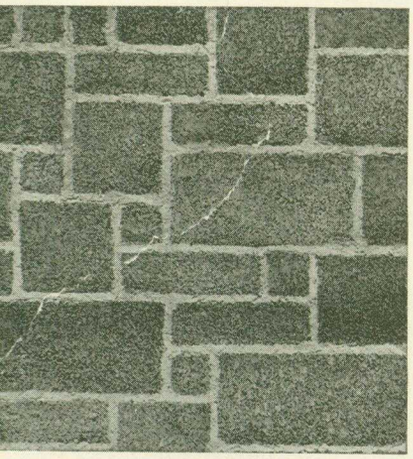
COURSED ASHLAR



RANDOM ASHLAR



RANDOM AND COURSED



RANDOM ASHLAR

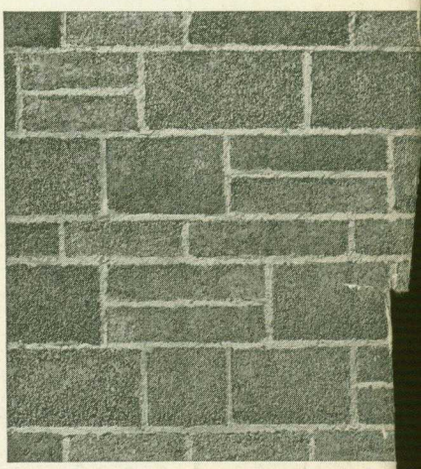
▪ ASHLAR ▪

Increasingly popular in home construction is the use of concrete ashlar walls. Ashlar walls are built with one or more sizes of masonry units combined to form attractive patterns.

Illustrated here are several patterns of concrete ashlar, the five panels showing both coursed and random patterns before applying cement paint. Coursed ashlar is so called because it has continuous horizontal joints; random ashlar has neither continuous horizontal nor vertical joints.

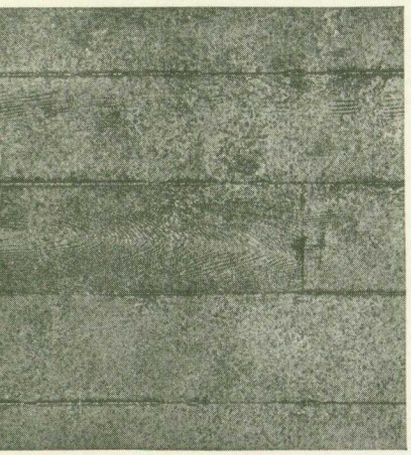
While the texture of the masonry units and the patterns in which they are laid up are the chief elements producing charm in ashlar walls, color and decoration are important factors. Very attractive finishes can be secured by means of portland cement paint—available in a variety of colors—applied over the entire wall area. Hand brushing is recommended.

There are many more ashlar patterns available than can be shown here. All are interesting, and all concrete ashlar offers the same values in durability and economy.

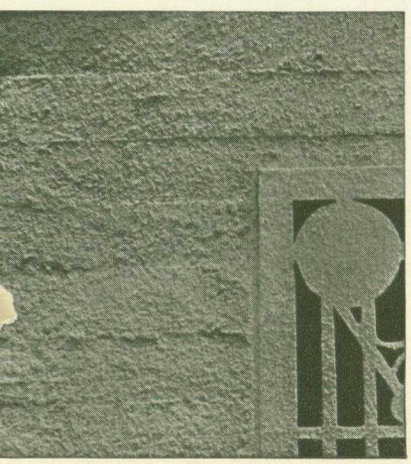


COURSED ASHLAR

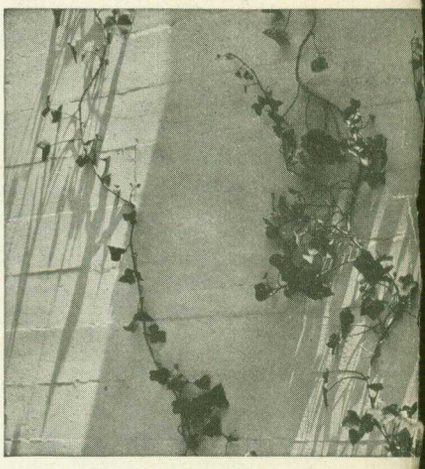
WIDE BOARD TEXTURE



STUCCO DASH COAT



BOARD MARKED, PAINTED



TOOLED SURFACE

▪ CAST-IN-PLACE WALLS ▪

The development of the reinforced concrete home—cast-in-place walls and floors—has brought an entirely new group of characteristics to the concrete home. Since concrete takes the texture of the material in which it is molded, there is a variety of formed surfaces—rough, rustic effects produced by unfinished form lumber; smooth surfaces produced by forms lined with plywood; and patterned surfaces obtained with special form linings.

By nailing strips or molds to the inside face of the forms, novel patterns are formed in reinforced concrete walls. Other textures may be produced by brushing the surfaces to reveal the aggregates and by tooling the wall to reveal the color of any special aggregates used in the concrete.

Reinforced concrete walls may be left as they come from the forms. Interesting effects can be produced by adding portland cement paints of various colors without disturbing the natural surface texture. Thin dash coats of stucco may be applied over concrete walls, producing interesting shadow effects but still retaining form marking. The plasticity of concrete makes any conceivable texture possible for the reinforced concrete home.

How you can get

A CONCRETE HOME

DURING the past year, thousands of prospective home builders interested in the firesafe concrete house have asked us: How can I get a concrete house? How shall I proceed to get the kind of house I want? Whom do you recommend as the designer? Who should build it? How can I finance it? And how much will it cost? To help you save time and money in planning your concrete home, these important questions are answered here.

Who Should Design My Concrete House?

You should have an architect who is familiar with concrete and its many uses as your house designer. If you like one of the designs in this book, write to the designer for permission and arrangements for the use of his plan. If you have other ideas for a house, see a local architect who knows concrete design and construction. Ask your concrete masonry manufacturer or concrete contractor to suggest names of reliable architects experienced in concrete design.

Who Should Build My Concrete House?

Only an experienced and reputable builder should be commissioned to erect your concrete house, and he should be thoroughly acquainted with the new technique of concrete construction. Your local concrete products manufacturer or concrete contractor can put you in touch with competent builders.

How Can I Finance My House?

Go over your house plans with your financing agency to be sure that your house is designed to secure the most favorable arrangements. It is possible for you to get loans insured by the Federal Housing Administration payable for periods up to 20 years. Other types of loans can be made on similar easy terms.

How Much Will My Concrete House Cost?

It is impossible to give an accurate figure on the construction of any house without complete plans showing the type of equipment to be used and the cost of material and labor in your community. These figures vary widely in different localities. When you show your plan to your local builder he will be able to give close estimates based on local conditions. If the first bid you get is higher than your budget allows, do not sacrifice firesafety to bring the cost within your means. The walls, floors and roof, which provide fire protection, are generally much less than half the cost of the complete house. By adjusting the type of equipment and furnishings used, you can reduce the total cost of the house quickly, to fit your pocketbook, without sacrificing all-important firesafety and the many other advantages that go with it.

• • •

Not all builders are familiar with the latest developments in concrete house construction. Therefore, we urge that you consult builders who can assure of their ability to give you quality materials and workmanship. When in doubt about designers or builders, see your local concrete products manufacturers or concrete contractors. They are informed about experienced builders, and will gladly help you get a satisfactory bid and a good job.

PORTLAND CEMENT ASSOCIATION

33 West Grand Avenue • Chicago, Illinois

PRINTED IN U.S.A.

P-32—Second Edition—25M—8-40